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May 31, 2005

4629.02

California Regional Water Quality Control Board  
5550 Skylane Boulevard  
Santa Rosa, California 95403

Attention: Mr. Cody Walker

Subject: Groundwater Monitoring Report; First Biannual 2005  
Former Shell Bulk Plant-AST Area, 400 Eighth Street, Fortuna, California  
CRWQCB Case No. 1THU116

Dear Mr. Walker:

LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the first biannual of 2005 and monthly monitoring for March 2005. This report has been prepared for Humboldt Petroleum, Inc. Please call or email if you have any questions or concerns.

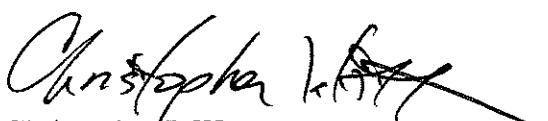
Sincerely,  
LACO ASSOCIATES

  
Caroline Levenda  
Staff Geologist

CJL:cs

cc: Mr. Jim Seiler, Humboldt Petroleum, Inc. (electronically sent)  
Ms. Carol Campagna, Shell Oil

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Christopher J. Watt

PG 7586, Exp. 03/31/06



# GROUNDWATER MONITORING REPORT

## FIRST BIANNUAL 2005

### **INTRODUCTION**

Field activities were conducted on March 30 and April 26, 2005, in accordance with generally accepted practices at this or similar locations. In addition, on April 15, 2005, monitoring wells MW3, MW31, and MW32 were redeveloped due to sediment impactation. The well development records can be found in Attachment 3. Please refer to Tables A and B for the current groundwater monitoring regime and to the LACO ASSOCIATES' (LACO's) *Standard Operating Procedures No. 1* (SOP) on file at your office for details. A location map and site map are included as Figures 1 and 2, respectively. A key to abbreviations is included as Attachment 4.

### **SITE CHRONOLOGY**

- 1993: Soil and groundwater contamination investigation is initiated.
- 1993 through 2003: The monitoring well network is constructed.
- August 2001: 2200 cubic yards of contaminated soil is excavated.

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW3	3-20	2.23	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	NA	Monthly
MW10	3-18	3.71	---	---	---		
MW11	2-14	8.72	---	---	---		Monthly DTW only
MW14	6-15	6.1	---	---	---		
MW17D	22.5-27.5	7.48	---	---	---		

TABLE A: SAMPLING EVENT: March 30, 2005 (continued)							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW18	18.5-21.5	---	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	NA	Monthly
MW31	16.5-18	2.12					
MW32	14-15.5	2.49					

TABLE B: SAMPLING EVENT: April 26, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW3	3-20	6.29	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	NA	Biannually
MW7	6-25	5.8					
MW9	3-18	8.56					
MW10	3-18	7.35					
MW11	2-14	12.96		---			
MW14	6-15	10.28		---			

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE				
					ORGANICS	INORGANICS					
MW17S	15.5-18	3.47	3/4" B	---	TPHg, TPHd, BTEX, MTBE	NA	Biannually				
MW17D	22.5-27.5	8.33		---							
MW18	18.5-21.5	---		---							
MW21	10-12	6.69	Cam Pump	pH, T, ECw, ORP, DO							
MW26	5-10	4.91	DHP								
MW31	16.5-18	4.96									
MW32	14-15.5	4.29									

## HYDRAULIC GRADIENT AND HYDROGEOLOGY

The hydrogeology of the site has been characterized as a perched zone with two semi-confined units consisting of silty sands with interbedded silty clays. The hydraulic gradient contour maps for March 30 and April 26, 2005, are included as Figures 3 and 4, respectively. Please refer to Table 1 for groundwater elevations. The hydraulic gradient for March 30, 2005, using groundwater elevations from monitoring wells MW14, MW21, and MW26, was determined to have a S20°W trend with a 9.4 percent slope and is representative of Unit 1 of the aquifer. The hydraulic gradient for April 26, 2005, using groundwater elevations from monitoring wells MW10, MW11, and MW14, was determined to have a S22°W trend at a 14 percent slope and is also representative of Unit 1 of the aquifer.

## LABORATORY RESULTS

Laboratory analytical results from the March 30 and April 26, 2005, sampling events are summarized in Table C and D, respectively, included below. Laboratory analytical results are summarized in Table 1 and a copy of the current laboratory report is included as Attachment 2. Laboratory notes are included in the case narrative of the laboratory analytical results found in Attachment 2.

TABLE C: Analytical Result for the March 30, 2005, Sampling Event								
MONITORING WELL ID	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW3	180	ND<50	ND<170	38	1.2	ND<0.50	0.59	ND<3.0
MW31	1,100	82	ND<170	240	ND<20	ND<5.0	ND<5.0	ND<8.0
MW32	2,000	160	ND<170	680	13	ND<10	ND<5-10	ND<20

TABLE D: Analytical Result for the April 26, 2005, Sampling Event								
MONITORING WELL ID	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW3	180	ND<50	ND<170	38	1.2	ND<0.50	0.59	ND<3.0
MW7	500	ND<50	---	13	4.9	2.8	2.1	ND<18
MW9	160	69	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW10	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW11	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW14	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW17S	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW17D	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW21	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW26	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW31	1,000	83	---	270	7.9	ND<5.0	ND<5.0	ND<7.0
MW32	2,400	150	---	630	15	ND<12	ND<12	ND<20

## DISCUSSION OF BIANNUAL AND MONTHLY RESULTS

Analytical results reported for monitoring wells sampled during the first biannual of 2005 and the monthly monitoring for March 2005, generally fall within the range reported for previous sampling events at the site over the historic monitoring period.

### March 30, 2005, Sampling Event

- The laboratory noted that groundwater samples taken from monitoring wells MW3, MW31, and MW32 include peaks within the gasoline range and reported gasoline components.

### April 26, 2005, Sampling Event

- The laboratory noted that the groundwater samples taken from monitoring wells MW3, MW7, MW9, MW31, and MW32 include peaks within the gasoline range and reported gasoline components.

The historical analytical results for the monitoring wells sampled in the March 30, 2005, and April 26, 2005, sampling events are included in Table 1. The groundwater intrinsic parameters of oxidation-reduction potential (ORP) and dissolved oxygen (DO) levels for the March 30 and April 26, 2005, sampling events can be found in Attachment 1.

## DECAY RATES AND MONITORING NATURAL ATTENUATION (MONA)

Time-series plots of exponential trend lines of total petroleum hydrocarbons as gasoline (TPHg) and benzene concentrations for monitoring wells MW31 and MW32 are included in Charts 1 through 4. Decay rates for TPHg and benzene concentrations are derived from the time-series

plots and analytical results. TPHg and benzene concentrations for the decay rate analysis were chosen on a seasonal basis where depth-to- water measurements were within 0.5 feet of one another. The decay rates were calculated using first order decay rate equation:

$$\text{Concentration Final (C}_f\text{)} = \text{Concentration Initial (C}_i\text{)} * e^{(-\text{decay constant } (-k) * \text{time}(t))}$$

The water quality objective (WQO) dates for TPHg and benzene for monitoring wells MW31 and M32 are included below in Tables E and F, respectively. Worksheet 1 also presents “fast” and “slow” degradation rates, based on published cyclohexane half-life data, to compare to observed degradation rates. Half-lives of TPHg are not available due to the complex formulations of TPHg mixtures; however, cyclohexane is a major component in standard gasoline formulation, making up to approximately 32 percent by volume of the formulation (Nyer et al., 1996). Cyclohexanes were also reported as a major component in a groundwater sample collected at another underground storage tank (UST) site impacted by weathered/degraded gasoline in Fortuna, California. Attachment 5 presents a data sheet from Agricultural and Priority Pollutants Laboratories, Inc (APPL) illustrating the relative concentrations of separate analytes making up degraded and dissolved TPHg. Based on data presented in Attachment 5, cyclohexanes comprise approximately 36 percent of the TPHg from the Fortuna site. This supports Nyer’s estimate; therefore, we conclude that cyclohexane is a representative proxy when calculating a decay rate for TPHg.

Cyclohexane “fast” and “slow” half-lives for aqueous biodegradation under anaerobic conditions, were obtained from Howard’s Handbook of Environmental Degradation Rates (Howard, 1991). The degradation rates of TPHg were determined using the first order decay equation presented above.

A comparison of decay rates for benzene and TPHg is included as Table 2. Tables E and F summarize the results of the chart forecasting, TPHg degradation rate derivations, and WQO achievement date estimates for on-site monitoring wells MW31 and MW32.

**Table E: MW31 Decay Rates and WQO Achievement Dates for TPHg and Benzene**

MW31	Trend Line Estimates from Chart	Estimates from Sampling Results
<u>TPHg</u>		
DECAY RATE (k in days)	0.00167	0.00145
Year of WQO Achievement (TPHg: 50 µg/L)	2010	2011
<u>Benzene</u>		
DECAY RATE (k in days)	0.00149	0.00182
Year of WQO Achievement (benzene: 1.0 µg/L)	2016	2013

**Table F: MW32 Decay Rates and WQO Achievement Dates for TPHg and Benzene**

MW32	Trend Line Estimates from Chart	Estimates from Sampling Results
<u>TPHg</u>		
DECAY RATE (k in days)	0.00149	0.00050
Year of WQO Achievement (TPHg: 50 µg/L)	2015	2025
<u>Benzene</u>		
DECAY RATE (k in days)	0.0008	0.00043
Year of WQO Achievement (benzene: 1.0 µg/L)	2026	2047

*Monitoring Well MW31*

- The trend line fit to historical groundwater data for TPHg indicates WQO achievement in the year 2010. The decay rate equation for TPHg indicates WQO achievement in the year 2011.
- The trend line fit to historical groundwater data for benzene indicates WQO achievement in the year 2016. The decay rate equation for benzene indicates WQO achievement in the year 2013.

### *Monitoring Well MW32*

- The trend line fit to historical groundwater data for TPHg indicates WQO achievement in the year 2015. The decay rate equation for TPHg indicates WQO achievement of 2025.
- The trend line fit to historical groundwater data for benzene indicates WQO achievement in the year 2026. The decay rate equation for benzene indicates WQO achievement in the year 2047.

## **CONCLUSIONS**

- As stated in the February 14, 2003, letter to your office regarding the subject property, "The purpose of the amendment is to provide a contingency for active remediation of the Above-ground storage tank (AST) area should groundwater monitoring data in the next 5 years not reveal a trend towards achieving water quality objectives in the next twenty years." Current decay rate and trend line analyses presented in this report suggests the WQOs for TPHg and benzene will be met within 20 years.

## **RECOMMENDATIONS**

- LACO requests a meeting with the CRWQCB to discuss consideration of the AST area of the subject property for "No Further Action" as decay rate and trend line analyses suggests natural attenuation will result in achievement of the WQOs.

## **FUTURE WORK**

- Biannual sampling and measuring of the AST area monitoring wells, MW3, MW7, MW9 through MW11, MW14, MW17S, MW17D, MW18, MW21, MW26, MW31 and MW32, is scheduled for September 2005.
- Monthly sampling and measuring of monitoring wells, MW3, MW18, MW31, and MW32 and measuring only of monitoring wells, MW10, MW11, MW14 and MW17D, will continue.

## **REFERENCES**

- Howard, Philip H., Handbook of Environmental Degradation Rates, 1991. pg. 111 and pg. 422.  
CRC Press LLC, Boca Raton, FL.
- Nyer, Evan K., In Situ Treatment Technology, 1996. pg. 10. CRC Press, Inc., Boca Raton, FL.

## **LIST OF FIGURES, TABLES, WORKSHEETS, AND ATTACHMENTS**

Figure 1: Location Map

Figure 2: Site Map

Figure 3: Hydraulic Gradient for March 30, 2005

Figure 4: Hydraulic Gradient for April 26, 2005

Table A: Sampling parameters and groundwater elevations for March 30, 2005

Table B: Sampling parameters and groundwater elevations for April 26, 2005

Table C: Analytical results for the March 30, 2005 sampling event

Table D: Analytical results for the April 26, 2005 sampling event

Table E: MW31 Decay Rate and Trend Line Results

Table F: MW32 Decay Rate and Trend Line Results

Table 1: Historical Groundwater Elevation and Analytical Data

Table 2: Comparison of Decay Rates for TPHg and Benzene

Worksheet 1: Decay Rates from Monitoring Wells MW31 and MW32, Derived from Analytical Results

Attachment 1: Field Monitoring Forms with Groundwater Parameters for March 30 and April 26, 2005

Attachment 2: Laboratory Analytical Data for March 30 and April 26, 2005

Attachment 3: Well Development Records

Attachment 4: Key to Abbreviations

Attachment 5: APPL Inc. - Cyclohexane reference

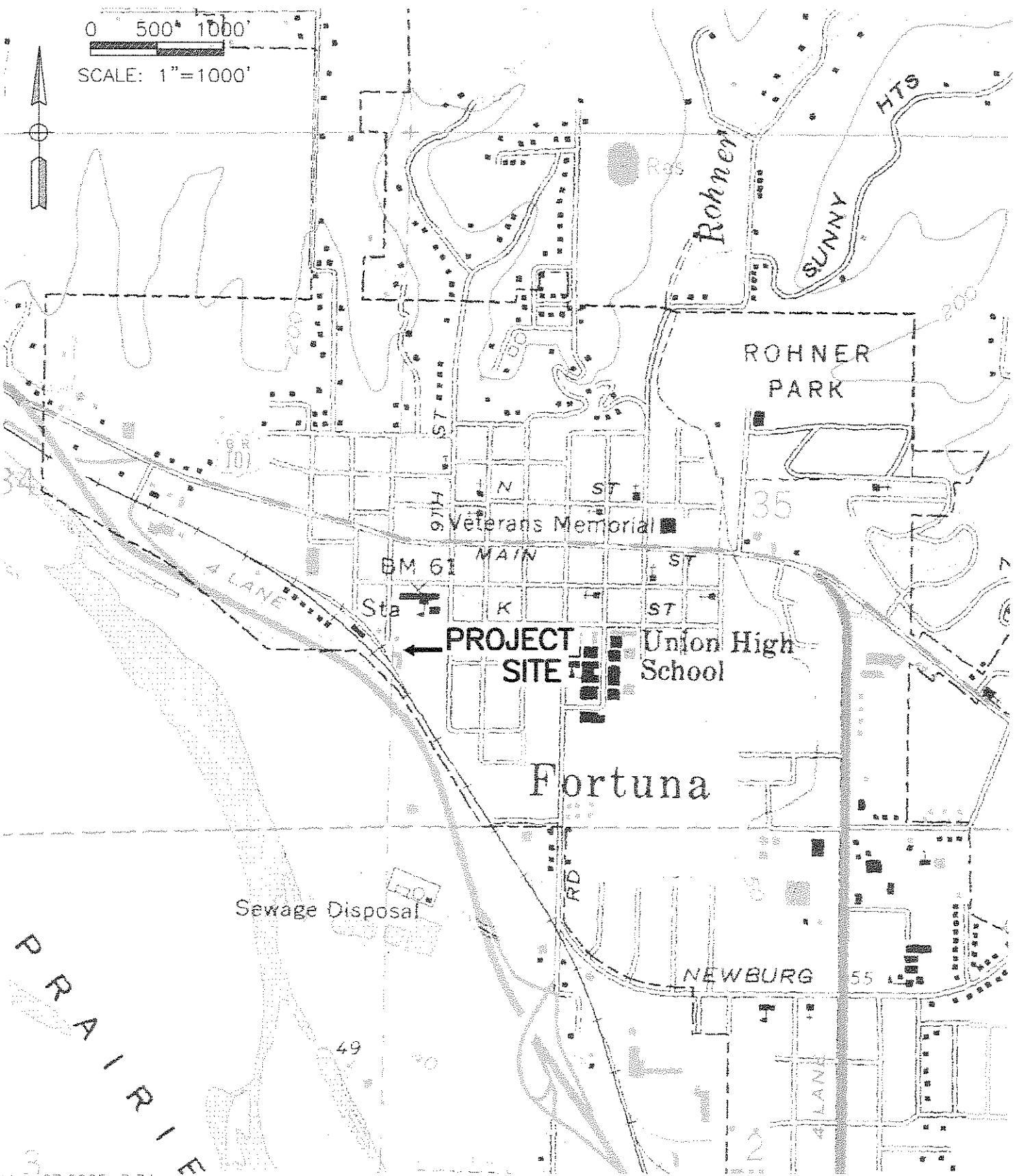


**LACO ASSOCIATES**  
CONSULTING ENGINEERS  
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	HUMBOLDT PETROLEUM INC	DATE	5/12/05	1
LOCATION	FORMER BULK PLANT, FORTUNA, CA	CHECK	JOB NO.	
	LOCATION MAP	SCALE	1"=1000'	4629.02

0 500' 1000'

SCALE: 1"=1000'

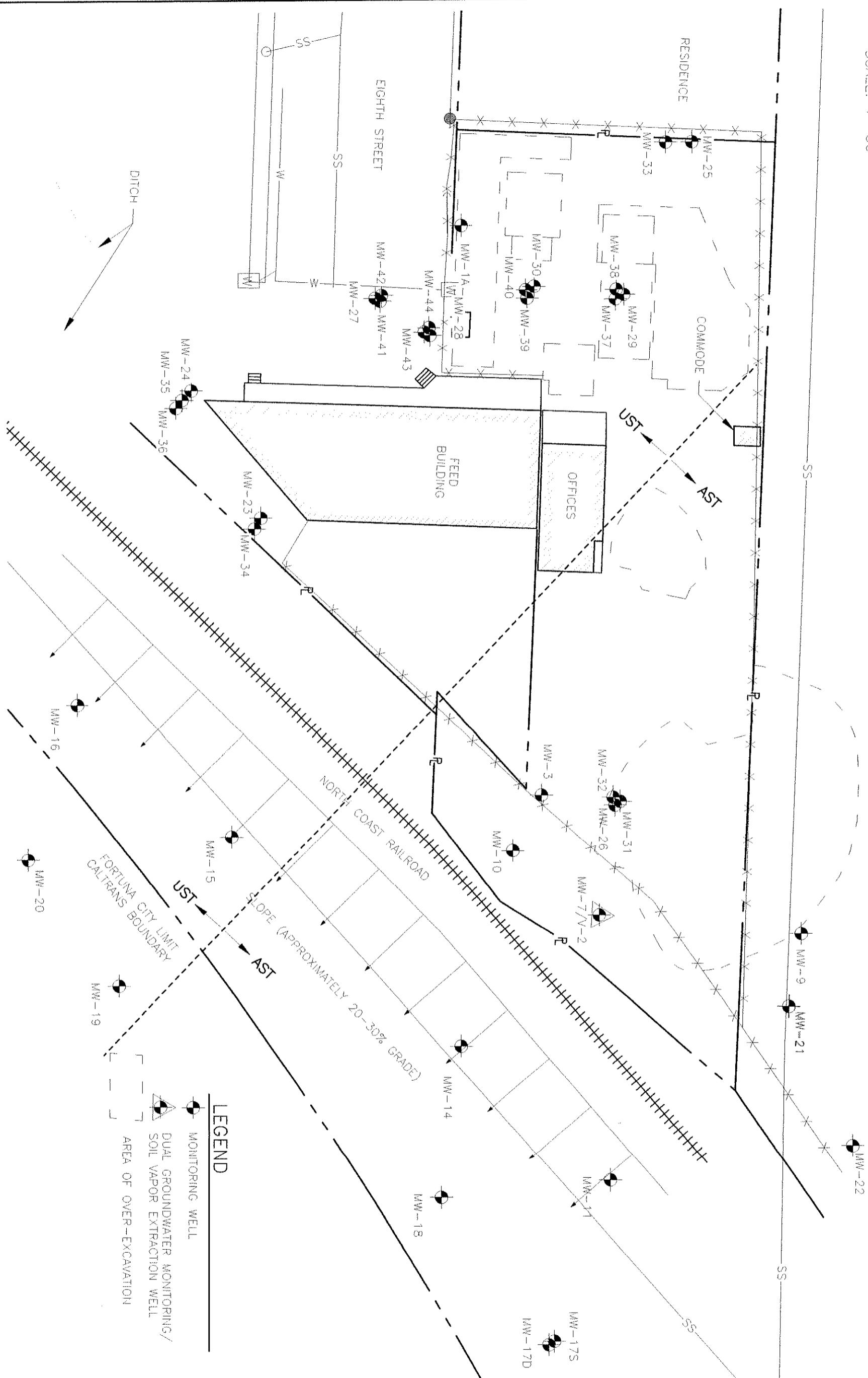


May 27, 2005 - 3:34pm

T:\CADFILES\4600\4629 HPI Bulk Oil Plant\dwg\4629-GMR.02 10-may05\ 4629Fig1.dwg

0 15' 30'  
SCALE: 1" = 30'

FORTUNA UNION  
ELEMENTARY SCHOOL



**GROUNDWATER MONITORING**

**REPORT - AST AREA**

**SITE MAP**

**HUMBOLDT PETROLEUM, INC**  
**FORMER BULK PLANT, FORTUNA, CA**

**LACO ASSOCIATES**



CONSULTING ENGINEERS

21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

SCALE	1" = 30'
DRAWN	RJM
CHECKED	
APPROVED	
DATE	5/12/05
JOB NO.	4629.02
FIGURE	2



0 15' 30'  
 SCALE: 1"=30'

FORTUNA UNION  
 ELEMENTARY SCHOOL

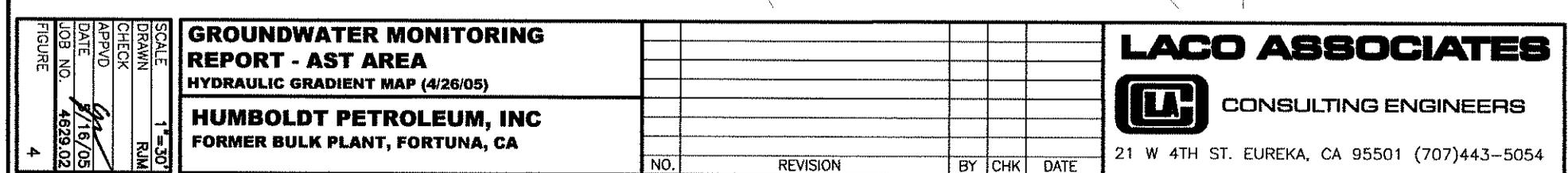
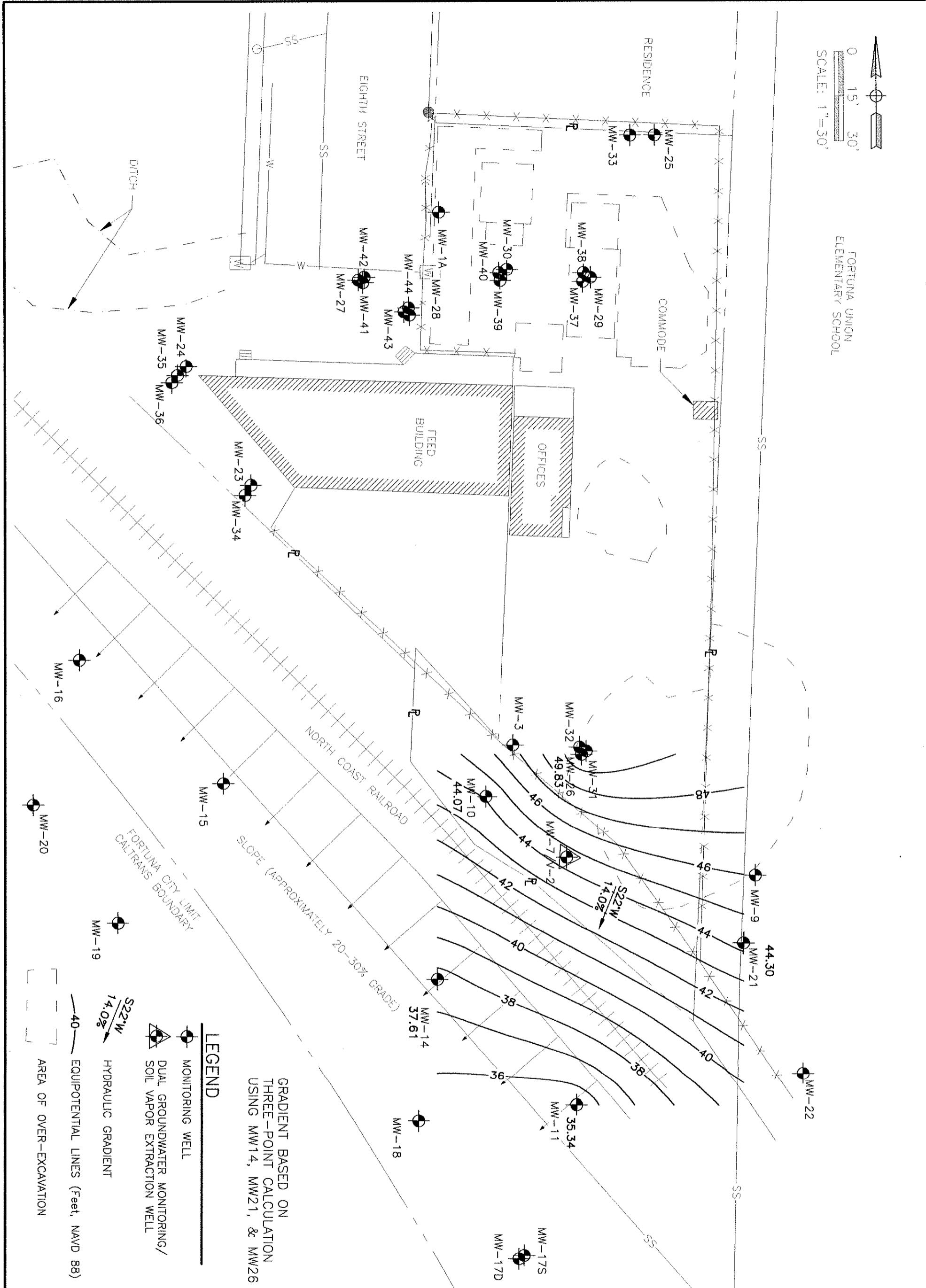


TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629-03; CRWQCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-1	50.87													
10/7/93	46.27	4.60	4,500	560 <sup>a,f</sup>	ND <500	—	2,000	110	ND	195	—	—	—	—
11/1/93	43.55	7.32	—	—	—	—	—	—	—	—	—	—	—	—
12/29/93	48.20	2.67	16,000	1,300	ND <500	—	5,300	270	120	490	—	—	—	—
1/24/94	49.75	1.12	—	—	—	—	—	—	—	—	—	—	—	—
2/24/94	50.19	0.68	—	—	—	—	—	—	—	—	—	—	—	—
3/28/94	49.34	1.53	—	—	—	—	—	—	—	—	—	—	—	—
4/25/94	49.36	1.51	14,000	5,500	—	ND	5,500	64	ND	150	—	—	—	—
5/12/94	48.84	2.03	—	—	—	—	—	—	—	—	—	—	—	—
6/3/94	48.13	2.74	—	—	—	—	—	—	—	—	—	—	—	—
7/19/94	45.78	5.09	0.92	feet free product	—	—	—	—	—	—	—	—	—	—
9/21/94	43.07	7.80	—	—	—	—	—	—	—	—	—	—	—	—
10/25/94	42.05	8.82	—	—	—	—	—	—	—	—	—	—	—	—
11/16/94	47.71	3.16	—	—	—	—	—	—	—	—	—	—	—	—
12/8/94	48.63	2.24	—	—	—	—	—	—	—	—	—	—	—	—
1/9/95	50.07	0.80	15,000	390,000	—	—	3,100	180	330	800	—	—	—	5.0
2/17/95	50.59	0.28	—	—	—	—	—	—	—	—	—	—	—	—
3/7/95	49.75	1.12	—	—	—	—	—	—	—	—	—	—	—	—
4/5/95	49.48	1.39	11,000	21,000	—	19	4,900	140	200	380	—	—	—	4.0
4/5/95 (D)	duplicate sample		13,000	24,000	—	18	4,300	120	160	380	—	—	—	—
6/23/95	48.41	2.46	—	—	—	—	—	—	—	—	—	—	—	—
7/5/95	47.39	3.48	17,000	23,000	—	8.1	6,800	510	190	610	—	—	—	3.0
8/3/95	46.55	4.32	—	—	—	—	—	—	—	—	—	—	—	—
9/6/95	46.06	4.81	—	—	—	—	—	—	—	—	—	—	—	—
10/9/95	46.36	4.51	5,800	8,100	—	ND	2,100	48	100	150	—	—	—	1.5
11/16/95	46.89	3.98	—	—	—	—	—	—	—	—	—	—	—	—
1/16/96	49.90	0.97	20,000	25,000	—	23	7,100	400	380	940	—	—	—	2.0
4/23/96	50.17	0.70	17,000	23,000	—	11	6,600	280	300	730	—	—	—	3.0
4/23/96 (D)	duplicate sample		19,000	17,000	—	3.1	6,100	250	290	590	—	—	—	—
7/10/96	48.17	2.70	11,000	13,000	—	ND	4,700	160	290	510	—	—	—	3.0
10/22/96	46.59	4.28	12,000	8,800	—	1.8	3,800	110	160	280	—	—	—	3.0
1/21/97	50.17	0.70	15,000	9,100	—	4.7	4,800	180	220	550	ND	—	—	4.0
4/15/97	49.17	1.70	11,000	5,400	—	7.3	3,900	130	210	470	ND	—	—	3.0
4/15/97 (D)	duplicate sample		10,000	5,300	—	—	3,700	140	210	490	260	—	—	—
5/20/97	48.82	2.05	—	—	—	—	—	—	—	—	—	—	—	—
7/29/97	46.92	3.95	11,000	21,000	—	—	3,300	68	150	220	ND	—	—	3.0
10/15/97	47.12	3.75	13,000	11,000 <sup>b</sup>	—	1.8	5,500	140	120	380	250	—	—	4.0
1/20/98	50.67	0.20	2,600	5,300 <sup>b</sup>	—	ND	880	24	30	78	ND	—	—	3.0
1/26/98 (D)	50.87	—	2,700	1,900	—	—	780	ND	ND	69	ND	—	—	—
4/15/98	50.07	0.80	12,000	8,000	—	50.0	3,400	93	210	380	ND	—	—	3.8
7/28/98	46.67	4.20	7,300	5,500 <sup>b</sup>	—	5.7	1,700	53	120	190	ND <2.5	—	—	2.6
1/26/00	0.83	14,000	10,000	1,900	—	3,300	700	70	252	—	—	—	—	—
			6,300	—	—	—	—	—	—	—	—	—	—	—
			w/sticca gel cleanup	w/sticca gel cleanup	—	—	—	—	—	—	—	—	—	—
			50.04	—	—	—	—	—	—	—	—	—	—	—

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna  
LACO No. 4629/03; CRWQCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-1, Continued</b>														
5/3/00	49.60	1.27	3,700	3,200	190	—	1,100	62	110	1.3	5.0	ND<100	—	—
8/3/00	45.62	5.25	11,000	7,600	340	—	2,700	79	72	0.64	1.2	ND<150	—	1.7
10/1/00	44.39	6.48	9,900	6,200	360	—	3,400	61	69	0.73	0.73	ND<10	—	—
11/14/00	well destroyed											COD - 63,000	—	—
<b>MW-1A</b>														
2/1/01	well reinstalled											ND<1.20	ND<2.5-5.0	—
2/14/01	46.54	4.33	500	210	ND<170	—	77	3.1	1.3	5.1	5.1	ND<1.0	ND<1.0	—
4/12/01	49.30	1.78	900	200 w/ sgc	ND<170	—	110	4.3	3.9	—	—	ND<1.0	ND<1.0	1
7/10/01	46.19	4.89	1,400	680	ND<170	—	41	4.0	5.1	3.5	—	ND<1.0	ND<1.0	0.5
11/1/01	45.70	5.38	200	ND<50	ND<170	—	15	0.71	0.64	—	—	ND<1.0	ND<1.20	—
12/10/01	50.56	0.52	88	53	ND<170	—	8.7	ND<0.50	ND<0.50	0.73	0.73	ND<1.0	ND<1.0	0.4
3/28/02	49.63	1.45	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	1.0
6/27/02	47.26	3.82	65	ND<50	ND<170	—	1.8	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.4
9/1/02	44.17	6.91	190	ND<50	ND<170	—	17	ND<0.50	ND<0.50	0.52	0.68	ND<1.0	ND<1.20	—
1/3/03	48.26	2.82	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	4.4
3/26/03	50.86	0.22	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	2.84
6/19/03	48.00	3.08	ND<50	ND<50	ND<170	—	11	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.94
9/24/03	44.47	6.61	150	ND<50	ND<170	—	0.71	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.00
12/18/03	50.28	0.80	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.62
3/23/04	49.24	1.84	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.20
6/29/04	46.96	4.12	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.56
9/23/04	43.23	7.85	310	ND<50	ND<50	—	28	ND<2.0	ND<2.0	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.27
12/14/04	49.58	1.50	250	ND<50	ND<50	—	12	ND<1.0	ND<1.0	ND<0.50	ND<0.50	ND<1.0	ND<1.20	0.27
<b>MW-2</b>														
10/7/93	42.20	9.66	11,000	870 <sup>e,f</sup>	ND<500	—	4,200	55	ND<10	19	—	Tannin/Lignin = 20	—	—
11/1/93	42.58	9.28	—	—	—	—	—	—	—	—	—	—	—	—
12/29/93	46.65	5.21	—	—	—	—	—	—	—	—	—	—	—	—
1/24/94	51.65	0.21	12,000	1,500	ND<500	—	3,800	68	82	243	243	—	—	—
2/24/94	51.31	0.55	—	—	—	—	—	—	—	—	—	—	—	—
3/28/94	50.03	1.83	—	—	—	—	—	—	—	—	—	—	—	—
4/25/94	50.50	1.36	22,000	6,500	—	ND	6,800	99	210	420	420	—	—	—
5/12/94	47.82	4.04	—	—	—	—	—	—	—	—	—	Tannin/Lignin = 74	—	—
6/3/94	46.78	5.08	—	—	—	—	—	—	—	—	—	—	—	—
7/19/94	44.68	7.18	16,000	8,600	—	—	3,500	4,400	120	160	300	—	Tannin/Lignin: ND	3.2
9/21/94	42.26	9.60	—	—	—	—	—	—	—	—	—	—	—	—
10/25/94	40.99	10.87	17,000	3,400	—	ND	6,400	ND	120	190	190	—	Tannin/Lignin = 83	2.0
11/16/94	45.85	6.01	—	—	—	—	—	—	—	—	—	—	—	—
12/8/94	48.17	3.69	—	—	—	—	—	—	—	—	—	—	—	—
1/9/95	51.81	0.05	13,000	7,500	—	ND	3,200	75	160	890	890	—	Tannin/Lignin = 55	3.0
2/7/95	50.77	1.09	—	—	—	—	—	—	—	—	—	—	—	—
3/7/95	50.35	1.51	—	—	—	—	—	—	—	—	—	—	—	—
4/5/95	49.96	1.90	20,000	8,800	—	ND	5,900	150	450	2,000	2,000	—	Tannin/Lignin = 77	5.0

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna  
LACO No. 4622/03; CRWQCB Case No. 11HUU16

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg			TPHd			TPHmo			TPHir			Benzene ( $\mu\text{g/L}$ )			Toluene ( $\mu\text{g/L}$ )			Ethylbenzene ( $\mu\text{g/L}$ )			Total Xylenes ( $\mu\text{g/L}$ )			MTBE ( $\mu\text{g/L}$ )			Other Analytes ( $\mu\text{g/L}$ )			Dissolved Oxygen ( $\text{mg/L}$ )		
				( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )	( $\text{ng/L}$ )						
<b>MW-2 continued</b>																																				
6/23/95		46.93	4.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
7/5/95		45.91	5.95	19,000	11,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.5						
8/3/95		44.79	7.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
9/6/95		43.83	8.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10/9/95		42.99	8.87	14,000	8,800	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0						
11/16/95		42.41	9.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
1/16/96		51.59	0.27	10,000	11,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
4/23/96		50.59	1.27	13,000	14,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
7/10/96		46.26	5.60	15,000	13,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
10/22/96		43.31	8.55	7,100	8,500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
1/2/97		50.41	1.45	12,000	9,700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
1/21/97 (D)		duplicate sample			11,000	10,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
4/15/97		47.31	4.55	9,500	7,300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
5/20/97		46.91	4.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
7/29/97		44.76	7.10	14,000	8,600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
7/29/97 (D)		duplicate sample			14,000	8,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10/15/97		44.86	7.00	19,000	8,700 <sup>s</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
10/15/97 (D)		duplicate sample			16,000	6,300 <sup>s</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
1/20/98		51.61	0.25	7,900	8,100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0						
4/15/98		51.03	0.83	9,900	8,500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.2						
7/28/98		45.33	6.53	9,700	5,300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.4						
7/28/98 (D)		duplicate sample			9,300	4,500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
1/26/00		50.83	1.03	7,900	2,400	ND<500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
5/30/00		48.64	3.22	5,800	55	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
8/30/00		44.74	7.12	10,000	92	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10/1/00		42.37	9.49	11,000	ND<50	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6						
1/4/2001		46.09	5.77	3,000	280	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
4/12/01		49.59	2.27	1,100	65 w/ <i>silica</i>	ND>170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8						
		<i>cleanup gel</i>																																		
7/10/01		44.86	7.00	5,600	3,100	270	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3						
11/1/01		11.05	40.81	4.50	10,000	360	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
12/10/01		47.36	48.49	3.37	6,200	270	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8						
3/28/02		44.83	7.03	5,800	310	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0						
6/27/02		45.78	6.08	7,700	160	ND<170	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5						
9/11/02		well destroyed																												—						
<b>MW-3</b>		50.87		40.28	10.59	340	230 <sup>e</sup>	ND>500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10/7/93		11.39	39.48	43.91	6.96	1.30	690	170	ND>500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
11/29/93		47.44	49.57	47.11	3.76	5.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
1/24/94		47.11	44.83	45.78	5.77	5.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
2/24/94		45.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
3/28/94		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 17HU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHno ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTEB ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-3 continued</b>														
4/25/94	46.27	4.60	860	1,100	—	ND	190	ND	ND	ND	—	—	—	—
5/12/94	44.45	6.42	—	—	—	—	—	—	—	—	—	—	—	—
6/3/94	43.85	7.02	—	—	—	—	—	—	—	—	—	—	—	—
7/19/94	41.95	8.92	980	2,200	—	ND	240	10	4.7	11	—	—	—	4.0
9/21/94	39.38	11.49	—	—	—	—	—	—	—	—	—	—	—	—
10/25/94	38.40	12.47	530	1,200	—	ND	170	ND	ND	ND	—	—	—	3.0
11/16/94	39.47	11.40	—	—	—	—	—	—	—	—	—	—	—	—
12/8/94	44.48	6.39	—	—	—	—	—	—	—	—	—	—	—	—
1/9/95	50.83	0.04	510	1,100	—	ND	110	2.0	1.6	2.3	—	—	—	5.0
2/7/95	46.51	4.36	—	—	—	—	—	—	—	—	—	—	—	—
3/7/95	46.11	4.76	—	—	—	—	—	—	—	—	—	—	—	—
4/5/95	45.76	5.11	480	1,500	—	ND	130	3.1	ND	2.7	—	—	—	3.0
6/23/95	43.92	6.95	—	—	—	—	—	—	—	—	—	—	—	—
7/5/95	43.38	7.49	560	1,700	—	ND	130	4.6	1.6	2.1	—	—	—	3.0
8/3/95	42.40	8.47	—	—	—	—	—	—	—	—	—	—	—	—
9/6/95	41.19	9.68	—	—	—	—	—	—	—	—	—	—	—	2.5
10/9/95	40.46	10.41	570	2,300	—	ND	210	3.8	ND	4.6	—	—	—	—
11/16/95	39.82	11.05	—	—	—	—	—	—	—	—	—	—	—	—
1/16/96	48.44	2.43	680	2,200	—	1.4	200	3.8	ND	3.1	—	—	—	4.0
4/23/96	46.17	4.70	520	2,300	—	ND	160	2.2	ND	2.2	—	—	—	4.0
7/10/96	44.12	6.75	680	2,100	—	ND	240	5.4	ND	5.9	—	—	—	4.0
10/22/96	42.17	8.70	550	2,600	—	ND	210	2.2	ND	3.9	27	—	—	4.0
1/21/97	45.47	5.40	370	1,400	—	ND	87	1.2	ND	1.1	7.7	—	—	3.0
4/15/97	44.12	6.75	820	1,800	—	ND	170	3.3	2.5	4.2	32	—	—	4.0
7/29/97	43.27	7.60	790	2,300	—	—	230	ND	ND	ND	ND	ND	ND	4.0
10/15/97	43.62	7.25	2,100 <sup>s</sup>	2,100 <sup>s</sup>	—	ND<1.2	49	0.60	ND<0.50	0.57	4.9	—	—	3.0
1/20/98	49.59	1.28	370	1,100	—	ND	67	ND	ND	0.80	15	—	—	3.0
4/15/98	46.37	4.50	1,600	2,600	—	17	310	ND	ND	ND	ND	ND	ND	2.6
7/28/98	42.72	8.15	960	2,900	—	ND<5.0	230	6.2	3.8	4.2	6.7	—	—	2.0
1/26/00	46.87	4.00	1,400	370	ND<100	—	270	7.5	2.2	3.9	ND<3.0	—	—	—
5/3/00	44.88	5.99	640	ND<50	ND<170	—	200	ND<10	2.5	1.7	ND<10	—	—	5.1
8/3/00	42.07	8.80	1,000	ND<50	ND<170	—	210	8.5	2.8	3.0	ND<30	—	—	—
10/1/00	39.62	11.25	5,800	ND<50	ND<170	—	500	39	47	22.2	ND<20	—	—	0.7
1/4/2001	43.01	7.86	1,800	94	ND<170	—	580	91	3.3	4.9	ND<2	—	—	0.8
4/12/01	45.38	5.49	ND<100	ND<50 w/ silica gel	ND<170	—	10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	—	—	0.9
7/10/01	41.70	9.17	2,300	94	ND<170	—	610	12	4.3	8.14	ND<1.0	TBA - 20 DPE-1.8	1.0	—
11/1/01	Well is buried													
12/10/01	46.15	4.72	ND>50	ND>50	ND>170	—	ND>0.50	ND>0.50	ND>0.50	ND>1.0	ND<1.0	ND<1-20	—	—
3/28/02	45.80	5.07	82	62	ND>170	—	11	ND>0.50	ND>0.50	0.61	ND<1.0	ND<1-20	—	—
6/27/02	Well inaccessible													
3/25/03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9/23/03	9.97	1,000	65	ND>170	—	200	3.9	1.2	2.0	ND<1.0	ND<1-20	—	—	0.63
3/23/04	44.55	6.32	710	ND<50	ND<170	—	130	2.1	0.71	1.2	ND<1.0	ND<1-10	—	0.65

**TABLE I: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
<b>MW-3 Continued</b>														
9/22/04	39.64	11.23	2,100	110	ND<170	--	480	16	3.9	6.9	ND<20	--	--	0.52
3/30/05	48.64	2.23	1,80	ND<50	ND<170	--	38	1.2	ND<50	0.59	ND<3.0	--	--	0.51
4/26/05	44.58	6.29	1,400	71	--	270	11	2.7	4.5	ND<20	--	--	--	0.42
<b>MW-4</b>														
6/3/94	48.79	3.83	--	--	--	--	--	--	--	--	--	--	--	--
7/19/94	47.27	5.35	ND	ND	--	2,800	ND	ND	ND	ND	ND	--	--	3.0
9/21/94	44.29	8.33	--	--	--	--	--	--	--	--	--	--	--	--
10/25/94	42.99	9.63	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	7.0
11/16/94	47.75	4.87	--	--	--	--	--	--	--	--	--	--	--	--
12/8/94	49.87	2.75	--	--	--	--	--	--	--	--	--	--	--	--
1/9/95	52.62	0.00	ND	360	--	ND	ND	ND	ND	ND	ND	--	--	6.0
2/7/95	51.76	0.86	--	--	--	--	--	--	--	--	--	--	--	--
3/7/95	51.43	1.19	--	--	--	--	--	--	--	--	--	--	--	--
4/5/95	51.07	1.55	ND	86	--	ND	ND	ND	ND	ND	ND	--	--	4.0
6/23/95	49.47	3.15	--	--	--	--	--	--	--	--	--	--	--	--
7/5/95	48.87	3.75	ND	130	--	ND	ND	ND	ND	ND	ND	--	--	2.5
8/3/95	47.69	4.93	--	--	--	--	--	--	--	--	--	--	--	--
9/6/95	46.42	6.20	--	--	--	--	--	--	--	--	--	--	--	--
10/9/95	46.21	6.41	ND	69	--	ND	ND	ND	ND	ND	ND	--	--	2.5
1/16/96	51.75	0.87	ND	95	--	1,1	ND	ND	ND	ND	ND	--	--	4.5
4/23/96	51.42	1.20	ND	59	--	ND	ND	ND	ND	ND	ND	--	--	4.0
7/10/96	48.37	4.25	ND	53	--	ND	ND	ND	ND	ND	ND	--	--	4.0
10/22/96	46.10	6.52	ND	86	--	ND	ND	ND	ND	ND	ND	--	--	4.0
1/21/97	51.37	1.25	ND	81	--	ND	ND	ND	ND	ND	ND	--	--	3.0
4/15/97	49.62	3.00	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	3.0
5/20/97	49.10	3.52	--	--	--	--	--	--	--	--	--	--	--	--
7/29/97	46.97	5.65	ND	210	--	--	ND	ND	ND	ND	ND	--	--	--
10/15/97	46.67	5.95	ND<50	ND<50	--	ND<1.3	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	2.0
1/20/98	49.97	2.65	ND	140	--	ND	ND	ND	ND	ND	ND	--	--	2.0
4/15/98	51.27	1.35	ND	ND	--	1.0	ND	ND	ND	ND	ND	--	--	2.4
7/28/98	47.72	4.90	ND<50	75	--	ND<5.0	ND<0.50	1.1	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	3.2
1/26/00	51.85	0.77	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	--	--
5/3/00	51.13	1.49	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	--	--
8/3/00	46.33	4.29	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	--
8/3/00	47.22	4.90	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	--
10/11/00	45.65	6.97	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	0.8
1/4/2001	49.91	2.71	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	--
4/12/01	50.81	1.81	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	1.2
7/10/01	47.20	5.42	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	0.4
11/1/01	45.55	7.07	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	--
12/10/01	51.56	1.06	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	0.6
3/28/02	51.06	1.56	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	1.0
6/27/02	47.96	4.66	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	0.8
9/11/02	45.22	7.40	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	--
12/4/02	Well destroyed													

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant  
400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethybenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
														—
6/3/94	47.96	4.44	—	—	—	—	—	—	—	—	—	—	—	—
7/19/94	46.57	5.83	ND	400	—	—	ND	ND	ND	ND	ND	—	—	4.0
9/2/94	43.70	8.70	—	—	—	—	ND	ND	ND	ND	ND	—	—	—
10/25/94	42.40	10.00	ND	78	—	—	ND	ND	ND	ND	ND	—	—	1.0
11/16/94	47.42	4.98	—	—	—	—	—	—	—	—	—	—	—	—
12/8/94	48.75	3.65	—	—	—	—	—	—	—	—	—	—	—	—
1/9/95	51.32	1.08	ND	330	—	—	ND	1.8	ND	ND	2.2	—	—	5.0
2/7/95	50.54	1.86	—	—	—	—	—	—	—	—	—	—	—	—
3/7/95	50.02	2.38	—	—	—	—	—	—	—	—	—	—	—	—
4/5/95	49.84	2.56	53	380	—	—	ND	2.4	0.53	0.53	3.0	—	—	3.0
6/23/95	48.33	4.07	—	—	—	—	—	—	—	—	—	—	—	—
7/5/95	47.59	4.81	ND	400	—	—	ND	ND	ND	ND	ND	—	—	4.0
7/5/95 (D)	46.50	5.90	—	—	—	—	ND	ND	ND	ND	ND	—	—	—
8/3/95	45.56	6.84	—	—	—	—	—	—	—	—	—	—	—	—
9/6/95	45.08	7.32	ND	50	—	—	ND	ND	ND	ND	ND	—	—	6.0
10/9/95	44.77	7.63	—	—	—	—	—	—	—	—	—	—	—	—
11/16/95	51.30	1.10	ND	560	—	—	1.4	4.2	0.78	0.58	2.9	—	—	—
4/23/96	50.30	2.10	ND	590	—	—	ND	2.3	ND	ND	1.1	—	—	3.0
7/10/96	47.65	4.75	ND	380	—	—	ND	ND	ND	ND	ND	—	—	4.0
7/10/96 (D)	45.50	6.90	ND	380	—	—	ND	0.52	ND	ND	ND	—	—	—
10/22/96	50.05	2.35	75	320	—	—	ND	ND	ND	ND	ND	—	—	3.0
1/21/97	48.40	4.00	ND	330	—	—	ND	0.90	ND	ND	0.82	3.2	—	3.0
4/15/97	48.72	3.68	—	—	—	—	ND	0.69	ND	ND	ND	—	—	3.0
5/20/97	46.70	5.70	ND	450	—	—	ND	ND	ND	ND	ND	—	—	—
7/29/97	46.05	6.35	ND<50	450 <sup>a</sup>	—	ND<1.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	—	3.0
10/15/97	50.25	2.15	ND	430	—	ND	ND	ND	ND	ND	ND	—	—	3.0
4/15/98	50.35	2.05	ND	550	—	6.4	0.5	ND	ND	ND	ND	—	—	2.8
7/28/98	46.90	5.50	ND<50	220	—	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	—	2.6
1/26/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5/3/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8/3/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10/11/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1/4/2001	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4/12/01	49.65	2.75	ND<50	ND>50	ND>170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	—	0.7
7/10/01	46.32	6.08	ND<50	ND<50	ND<170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50-2.0	0.4
11/1/01	43.95	8.45	ND<50	ND<50	ND<170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50-2.0	—
1/21/01	50.40	2.00	ND<50	ND<50	ND<170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50-2.0	1.4
3/28/02	50.21	2.19	ND<50	ND<50	ND<170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50-2.0	0.9
6/27/02	48.30	4.10	ND<50	ND<50	ND<170	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50-2.0	0.35
9/11/02	Well not found	—	—	—	—	—	—	—	—	—	—	—	—	—
12/4/02	Well destroyed	—	—	—	—	—	—	—	—	—	—	—	—	—

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 17H1116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
MW-6	50.63	46.32	4.31	—	—	—	—	—	—	—	—	—	—	—
6/3/94	44.63	6.00	ND	—	—	—	—	ND	ND	—	—	—	—	2.0
7/19/94	42.17	8.46	—	—	—	—	—	—	—	—	—	—	—	—
9/21/94	41.30	9.33	ND	—	—	—	—	ND	ND	—	—	—	—	2.0
10/25/94	48.24	2.39	—	—	—	—	—	—	—	—	—	—	—	—
11/16/94	48.75	1.88	—	—	—	—	—	—	—	—	—	—	—	—
12/8/94	49.62	1.01	ND	150	—	—	—	ND	ND	ND	ND	—	—	3.0
1/9/95	49.01	1.62	—	—	—	—	—	—	—	—	—	—	—	—
2/7/95	48.28	2.35	—	—	—	—	—	—	—	—	—	—	—	—
3/7/95	48.20	2.43	ND	87	—	—	—	ND	ND	ND	ND	—	—	2.0
4/5/95	47.46	3.17	—	—	—	—	—	—	—	—	—	—	—	—
6/23/95	46.65	3.98	ND	120	—	—	—	ND	ND	ND	ND	—	—	3.5
7/5/95	49.70	0.93	ND	200	—	—	—	1.3	ND	ND	ND	—	—	—
8/3/95	46.03	4.60	—	—	—	—	—	ND	ND	ND	ND	—	—	—
9/6/95	46.13	4.50	—	—	—	—	—	ND	ND	ND	ND	—	—	—
10/9/95	47.14	3.49	ND	150	—	—	—	ND	ND	ND	ND	—	—	1.5
11/16/95	48.11	2.52	—	—	—	—	—	—	—	—	—	—	—	—
1/16/96	49.70	1.25	ND	140	—	—	—	ND	ND	ND	ND	—	—	2.0
4/23/96	49.38	2.85	ND	120	—	—	—	ND	ND	ND	ND	—	—	3.0
7/10/96	47.78	3.23	ND	120	—	—	—	ND	ND	ND	ND	—	—	3.0
10/22/96	47.40	—	ND	140	—	—	—	ND	ND	ND	ND	—	—	3.0
duplicate sample														
1/21/97	50.08	0.55	ND	120	—	—	—	ND	ND	ND	ND	—	—	—
4/15/97	48.88	1.75	ND	—	—	—	—	ND	ND	ND	ND	—	—	3.0
5/20/97	47.96	2.67	—	—	—	—	—	ND	ND	ND	ND	—	—	3.0
7/29/97	47.13	3.50	ND	99	—	—	—	ND	ND	ND	ND	—	—	—
10/15/97	47.53	3.10	ND<50	86*	—	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	—	3.0
1/20/98	49.38	1.25	ND	52*	—	ND	ND	ND	ND	ND	ND	ND	—	2.0
4/15/98	49.28	1.35	ND	ND	—	2.8	ND	ND	ND	ND	ND	ND	—	2.6
7/28/98	47.15	3.48	ND<50	74*	—	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	—	2.4
1/26/00	49.23	1.40	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	—	—
5/3/00	47.95	2.68	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	—	—
8/3/00	44.50	6.13	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.7	—	0.7
10/11/00	44.83	5.80	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	31	—
1/4/2001	46.56	4.07	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	23	—
4/12/01	48.70	1.93	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	—
7/10/01	44.97	5.66	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	31	ND<0.50-20
11/1/01	45.14	5.49	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	25	ND<1-20
12/10/01	49.27	1.36	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	ND<1-20
3/28/02	48.33	2.30	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	32	TAME - 1.7
6/27/02	46.43	4.20	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	ND<1-20
9/11/02	43.73	6.90	—	—	—	—	—	—	—	—	—	—	15	ND<1-20
12/5/02	Well destroyed													

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant  
400 Eighth Street, Fortuna

LACO No. 4629.03; CRW/QCB Case No. 17HUU16

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )			TPHd ( $\text{ng/L}$ )			TPHmo ( $\text{ng/L}$ )			TPPhr ( $\text{mg/L}$ )			Benzene ( $\mu\text{g/L}$ )			Toluene ( $\mu\text{g/L}$ )			Ethybenzene ( $\mu\text{g/L}$ )			Total Xylenes ( $\mu\text{g/L}$ )			MTBE ( $\text{ng/L}$ )			Other Analytes ( $\mu\text{g/L}$ )			Dissolved Oxygen ( $\text{mg/L}$ )		
				51.05	42.49	8.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
6/3/94	7/19/94	40.62	10.43	5,100	4,700	—	—	—	2,700	—	—	—	460	87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0					
9/21/94	36.83	14.22	—	—	—	—	—	—	—	—	—	ND	430	46	95	59	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0						
10/25/94	35.87	15.18	4,000	2,500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
11/16/94	39.29	11.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
12/8/94	43.88	7.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
1/9/95	49.78	1.27	3,400	3,000	—	—	—	—	—	—	—	ND	350	66	99	73	—	—	—	—	—	—	—	—	—	—	—	—	—	5.0						
2/7/95	46.73	4.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
3/7/95	46.41	4.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
4/5/95	45.95	5.10	2,900	2,100	—	—	—	—	—	—	—	ND	340	38	61	39	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
6/23/95	42.86	8.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
7/5/95	42.75	8.30	3,500	2,700	—	—	—	—	—	—	—	ND	390	60	74	30	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
8/3/95	41.31	9.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
9/6/95	39.47	11.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
10/9/95	38.01	13.04	2,500	4,300	—	—	—	—	—	—	—	ND	330	45	55	35	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5						
11/16/95	36.76	14.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
1/16/96 (D)	47.83	3.22	1,900	4,900	—	—	—	—	3.1	—	—	—	250	38	49	43	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
4/23/96	46.40	4.65	2,100	3,300	—	—	—	—	—	—	—	ND	250	46	34	47	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
7/10/96	43.85	7.20	3,900	3,900	—	—	—	—	—	—	—	ND	570	54	110	83	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
10/22/96	38.25	12.80	3,200	4,100	—	—	—	—	2.2	—	—	—	390	54	57	43	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
1/21/97	45.95	5.10	2,900	5,500	—	—	—	—	2.5	—	—	—	370	15	41	33	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
4/15/97	43.50	7.55	4,200	3,000	—	—	—	—	2.9	—	—	—	340	37	50	45	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
5/20/97	43.40	7.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
7/29/97	40.70	10.35	3,800	4,200	—	—	—	—	—	—	—	ND	450	41	67	54	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
10/15/97	39.00	12.05	3,900	7,300 <sup>s</sup>	—	—	—	—	1.8	—	—	—	350	55	58	35	—	—	—	—	—	—	—	—	—	—	—	—	—	4.0						
1/20/98	49.90	1.15	2,000	2,300	—	—	—	—	1.1	—	—	—	140	23	ND	17	64	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
4/15/98	46.60	4.45	6,300	3,600	—	—	—	—	30	—	—	—	530	34	37	63	ND	—	—	—	—	—	—	—	—	—	—	—	—	3.0						
7/28/98	41.40	9.65	3,100	2,600	—	—	—	—	ND<5.0	—	—	—	360	29	32	26	36	—	—	—	—	—	—	—	—	—	—	—	2.6							
1/26/00	46.69	4.36	3,700	1,000	ND<500	—	—	—	280	—	—	ND<50	—	27	19	ND<30	—	—	—	—	—	—	—	—	—	—	—	—	—							
5/3/00	44.66	6.39	400	89	ND<170	—	—	—	61	—	—	ND<10	—	ND<3.0	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
8/3/00	40.27	10.78	890	ND<50	ND<170	—	—	—	120	—	—	14	—	9	5,3	ND<50	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9						
10/11/00	37.03	14.02	390	ND<50	ND<170	—	—	—	180	—	—	ND<1.0	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8							
1/4/2001	41.42	9.63	3,200	260	ND<170	—	—	—	340	24	—	25	—	18.6	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	—	—	0.5							
4/12/01	45.41	5.64	380	ND<50 w/ silica	ND<170	—	—	—	39	1.4	—	1.4	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5							
7/10/01	40.11	10.94	4,500	420	ND<170	—	—	—	380	—	—	33	—	36	32.6	—	ND<1.0	ND<1-20	2.0	—	—	—	—	—	—	—	—	—								
11/1/01	35.98	15.07	2,600	220	ND<170	—	—	—	340	26	—	26	—	21.7	ND<2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
1/2/10/01	46.31	4.74	ND>50	ND>50	ND>170	—	—	—	2.5	—	—	ND<0.50	—	ND<0.50	ND<0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—							
3/28/02	46.40	4.65	1,000	140	ND>170	—	—	—	41	3.4	—	4.4	—	4.0	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	—	3.7							
6/27/02	42.89	8.16	2,700	350	ND>170	—	—	—	370	25	—	23	—	19	—	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	1.0							
9/11/02	39.70	11.35	4,100	270	ND>170	—	—	—	320	22	—	ND<2.5	—	20	—	ND<0.5	ND<0.5	—	—	—	—	—	—	—	—	—	—	0.4								
3/27/03	—	—	3,300	140	ND<170	—	—	—	130	16	—	22	—	19.8	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	1.4								
9/23/03	40.05	11.00	1,200	74	ND<170	—	—	—	120	11	—	12	—	7.0	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	0.0								
3/23/04	44.96	6.09	690	ND<30	ND<170	—	—	—	26	2.4	—	3.0	—	2.7	—	ND<1.0	ND<1.0	—	—	—	—	—	—	—	—	—	—	0.68								

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/03; CRWQCB Case No. 17HU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHfr ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )	
<b>MW-7/V-2 continued</b>															
9/22/04	37.89	13.16	1,800	75	ND<170	—	230	28	16	10	ND<70	—	—	0.25	
4/26/05	45.25	5.80	500	ND<50	—	—	13	4.9	2.8	2.1	ND<18	—	—	0.65	
<b>MW-8</b>															
5/20/97	43.70	7.43	ND	74	—	ND	ND	ND	ND	ND	ND	ND	ND	—	
7/29/97	41.78	9.35	ND	150	—	ND<1.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	2.0	
10/15/97	39.86	11.27	ND<50	160*	—	ND<1.1	ND	ND	ND	ND	ND	ND	ND	3.0	
1/20/98	49.28	1.85	ND	110	—	4.1	ND	ND	ND	ND	ND	ND	ND	2.0	
4/15/98	48.13	3.00	ND	ND	—	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	2.2	
7/28/98	42.68	8.45	ND<50	ND<50	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	2.6	
1/26/00	48.08	3.05	ND<50	ND<50	ND<500	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	—	
5/3/00	44.47	6.66	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	—	
8/3/00	41.85	9.28	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	1.6	
10/1/00	39.06	12.07	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	1.0	
1/4/2001	40.89	10.24	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	—	
4/12/01	44.16	6.97	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	1	
7/10/01	42.13	9.00	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	0.4	
11/1/01	37.89	13.24	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	—	
12/10/01	44.01	7.12	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	4.7	
3/28/02	46.25	4.88	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	1.0	
6/20/02	Well Destroyed	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>MW-9</b>															
5/20/97	53.13	—	—	—	—	—	—	—	—	—	—	—	—	—	
5/29/97	42.95	10.18	1,200	1,700	—	7.6	400	ND	ND	ND	ND	ND	ND	—	
7/29/97	40.93	12.20	530	5,500	—	—	150	ND	ND	ND	ND	ND	ND	—	
10/15/97	39.13	14.00	3,200	13,000 <sup>6</sup>	—	13	160	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2.0	
1/20/98	49.23	3.90	150	990	—	ND	34	ND	ND	ND	ND	ND	ND	3.0	
4/15/98	47.18	5.95	460	940	—	26	2.5	ND	ND	ND	ND	ND	ND	2.6	
7/28/98	41.93	11.20	240	1,200	—	ND<5.0	66	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	2.2	
1/26/00	46.88	6.25	1,300	280	ND<500	—	470	2.6	2.6	1.9	ND<0.50	ND<0.50	ND<3.0	—	
5/3/00	43.88	9.25	340	ND<50	ND<170	—	100	1.1	1.1	0.93	ND<0.50	ND<0.50	ND<3.0	—	
8/3/00	41.33	11.80	350	ND<50	ND<170	—	120	1.1	1.1	1.2	ND<1.5	ND<1.5	ND<1.5	1.1	
10/11/00	38.85	14.28	810	ND<50	ND<170	—	390	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	0.7	
1/4/2001	40.69	12.44	950	230	ND<170	—	380	2.2	2.2	ND<1.0	ND<1.0	ND<1.0	ND<1.0	—	
4/12/01	42.44	10.69	1,600	67 w/ <i>silica</i> <i>gel cleanup</i>	ND<170	—	740	5.4	5.4	2.1	ND<2.0	ND<2.0	ND<2.0	ND<2.0	1.7
<b>MW-9</b>															
7/10/01	41.35	11.78	360	730	ND<170	—	45	1.2	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	4.0	
11/1/01	37.34	15.79	1,100	160	ND<170	—	310	3.2	0.62	0.80	ND<1.0	ND<1.0	ND<1.0	—	
12/10/01	43.83	9.30	270	ND<50	ND<170	—	39	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	—	
3/28/02	45.59	7.54	350	91	ND<170	—	1.8	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	1.0	
6/27/02	42.44	10.69	130	62	—	—	8.3	ND<1.0	ND<1.0	ND<1.0	ND<0.50	ND<0.50	ND<0.50	—	
9/11/02	13.66	690	110	ND<170	—	—	2.7	ND<1.0	ND<1.0	ND<1.0	ND<0.50	ND<0.50	ND<0.50	0.7	
3/27/03	39.47	240	58	250	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	3.52	
9/23/03	46.97	6.16	330	ND<50	ND<170	—	0.78	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.00	

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 17HJ116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-9 Continued</b>														
3/23/04	44.24	8.89	130	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	0.28
9/22/04	38.51	14.62	280	69	ND<170	—	ND<3.0	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.71
4/26/05	44.57	8.56	160	69	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.54
<b>MW-10</b> 51.42														
5/20/97	43.05	8.37	ND	910	—	—	7.6	ND	ND	ND	ND	ND	ND	ND
7/29/97	41.82	9.60	ND	1,100	—	—	ND<1.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
10/15/97	41.72	9.70	ND<50	860*	—	—	ND<1.1	ND	ND	ND	ND	ND	ND	ND
1/20/98	3.25	ND	640	—	—	—	5.6	ND	ND	ND	ND	ND	ND	ND
4/15/98	45.17	6.25	ND	800	—	—	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
7/28/98	41.37	10.05	ND<50	740	—	—	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
1/26/00	45.67	5.75	ND<50	69	ND<500	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
5/3/00	43.75	7.67	ND<50	ND<170	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
8/3/00	40.14	11.28	ND<50	ND<170	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
10/11/00	37.04	14.38	ND<50	ND<170	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
1/4/2001	41.78	9.64	ND<500	ND<170	—	—	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND
4/12/01	44.39	7.03	ND<250	ND<50	ND<170	—	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND
7/10/01	39.92	11.50	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
11/1/01	36.15	15.27	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
12/10/01	45.16	6.26	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
3/28/02	44.80	6.62	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
6/27/02	42.05	9.37	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
9/11/02	38.63	12.79	ND<50	ND<50	ND<170	—	1.6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
3/27/03	42.16	4.26	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
9/23/03	39.10	12.32	61	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
3/23/04	43.85	7.57	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
9/22/04	37.62	13.80	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
3/30/05	42.71	3.71	—	—	—	—	—	—	—	—	—	—	—	—
4/26/05	44.07	7.35	ND<50	ND<50	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
<b>MW-11</b> 48.30														
5/20/97	34.34	13.96	ND	—	—	—	ND	ND	ND	ND	ND	ND	ND	ND
7/29/97	32.30	16.00	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
10/15/97	32.45	15.85	—	—	—	—	Well Inaccessible	—	—	—	—	—	—	—
1/20/98	—	—	—	—	—	—	Well Inaccessible	—	—	—	—	—	—	—
4/15/98	—	—	—	—	—	—	Well Inaccessible	—	—	—	—	—	—	—
5/14/98	33.05	15.25	ND	320	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
7/28/98	37.89	10.41	ND<50	ND<50	ND<500	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
1/26/00	35.13	13.17	ND<50	ND<50	ND<170	—	0.73	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
5/3/00	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
8/3/00	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
10/11/00	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
1/4/2001	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
4/12/01	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
7/10/01	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
11/1/01	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
12/10/01	—	—	—	—	—	—	Insufficient amount of water to sample	—	—	—	—	—	—	—
3/28/02	35.45	12.85	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
37.06	11.24	—	ND<50	ND<50	210	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/33; CRWQCB Case No. 17HUU16

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen (mg/L)
<b>MW-11 Continued</b>														
6/27/02	Insufficient amount of water to sample	—	—	—	—	—	—	—	—	—	—	—	—	—
9/11/02	Insufficient amount of water to sample	—	—	—	—	—	—	—	—	—	—	—	—	—
3/27/03	40.69	7.61	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-2.0	3.7	—
9/23/03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/23/04	35.06	13.24	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	—	—
9/22/04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/30/05	39.58	8.72	ND<50	ND<50	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	—	—	—
4/26/05	35.34	12.96	—	—	—	—	—	—	—	—	—	—	—	—
<b>MW-12</b>														
5/20/97	47.67	3.44	47,000	7,000	—	7.8	12,000	1,600	1,000	2,600	ND	—	—	—
7/29/97	43.76	7.35	67,000	4,500	—	—	24,000	640	1,500	1,900	ND	—	4.0	—
10/15/97	46.74	4.37	24,000	2,600 <sup>s</sup>	—	2.1	8,300	160	560	770	ND<500	—	—	4.0
1/20/98	47.66	3.45	—	4,500 <sup>s</sup>	—	1.4	5,200	350	730	1,500	ND	—	3.0	—
4/15/98	48.91	2.20	110,000	2,900	—	3.6	42,000	ND	1,800	ND	ND	—	—	—
4/15/98 (D)	—	—	110,000	2,500	—	—	36,000	2,500	1,700	3,400	ND	—	—	—
7/28/98	46.16	4.95	72,000	4,900 <sup>s</sup>	—	ND<5.0	23,000	830	1,700	2,200	ND<2.5	—	—	—
1/26/00	49.17	1.94	12,000	410	ND<500	—	—	3,300	60	ND<5.0	52	ND<100	—	—
5/3/00	47.50	3.61	32,000	ND<50	ND<170	—	17,000	380	610	880	ND<300	—	—	—
5/3/00	—	—	31,000	—	—	—	17,000	360	560	800	ND<150	—	—	—
8/3/00	44.14	6.97	60,000	ND<50	ND<170	—	44,000	390	1200	417	ND<600	—	0.8	—
10/1/00	43.83	7.28	84,000	ND<50	ND<170	—	52,000	300	1,300	130	ND<100	—	0.8	—
1/4/2001	46.94	4.17	85,000	270	ND<170	—	45,000	180	1,000	ND<100	ND<100	—	—	—
4/12/01	48.37	2.74	15,000	180 <sup>w/</sup> <i>stifica</i> <i>gel</i>	ND<170	—	7,100	88	350	358	ND<20	—	0.6	—
<i>cleanup</i>														
7/10/01	44.61	6.50	52,000	300	ND<170	—	41,000	250	1,100	318	ND<20	ND<20-400	0.6	—
11/1/01	44.87	6.24	48,000	220	ND<170	—	50,000	190	700	321	ND<50	ND<20-400	—	—
1/2/10/01	49.51	1.60	19,000	100	ND<170	—	7,900	62	150	138	ND<5.0	COD -160000	0.2	—
3/28/02	48.33	2.78	20,000	180	ND<170	—	6,300	42	82	64	ND<50	ND<50-1000	0.9	—
6/27/02	46.22	4.89	19,000	480	ND<170	—	10,000	140	410	504	ND<4.0	ND<1-20	0.48	—
9/11/02	43.01	8.10	91,000	200	ND<170	—	45,000	190	750	184	ND<50	ND<50-1000	—	—
12/6/02	—	—	Well destroyed	—	—	—	—	—	—	—	—	—	—	—
<b>MW-13</b>														
5/20/97	50.19	44.09	6.10	38,000	3,400	—	ND	8,900	2,600	1,200	2,000	ND	—	—
7/29/97	45.19	5.00	37,000	3,200	—	—	7,400	1,700	1,300	1,400	ND	—	4.0	—
10/15/97	43.59	6.60	27,000	2,700 <sup>s</sup>	—	3.8	7,600	1,300	1,300	1,000	ND<500	ND<500	3.0	—
1/20/98	46.79	3.40	25,000	2,200 <sup>s</sup>	—	2.3	6,000	2,400	1,200	910	ND	ND	2.0	—
4/15/98	44.54	5.65	26,000	2,400	—	8.6	5,200	2,500	1,100	1,400	ND	ND	3.4	—
7/28/98	42.59	7.60	18,000	2,200 <sup>s</sup>	—	ND<5.0	3,800	1,200	870	720	ND<2.5	—	3.0	—
1/26/00	Well Not Found	43.95	6.24	2,800	ND<50	ND<170	—	440	210	180	234	ND<100	—	—
5/3/00	40.31	9.88	14,000	ND<50	ND<170	—	1,800	560	770	580	ND<350	—	0.8	—
8/3/00	39.69	10.50	13,000	ND<50	ND<170	—	1,900	290	760	356	14	—	1.2	—

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet)	Depth to Water (feet)	TRHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\text{mg/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\text{mg/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-13 Continued</b>														
1/4/2001	42.82	7.37	7,500	230	ND<170	—	620	350	320	294	4.7	—	—	—
4/12/01	44.50	5.69	210	ND<50	ND<170	—	34	2.7	3.8	7.58	ND<0.50	ND<1.0	1.3	—
7/10/01	40.27	9.92	6,100	150	ND<170	—	580	230	300	281	ND<1.0	ND<0.200	1.0	—
11/1/01	40.44	9.75	3,100	77	ND<170	—	610	52	120	68	ND<20	ND<1.0	—	—
12/10/01	46.61	3.58	ND<50	ND<50	ND<170	—	0.93	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	—	—
3/28/02	45.46	4.73	ND<50	ND<50	ND<170	—	2.2	ND<0.50	0.51	0.75	1.4	ND<1.20	1.0	—
6/27/02	41.52	8.67	520	ND<50	ND<170	—	50	15	35	22.7	ND<1.0	ND<1.20	0.66	—
9/11/02	38.64	11.55	2,800	100	ND<170	—	320	49	180	71.1	2.2	ND<1.20	2.22	—
12/9/02	Well destroyed													
<b>MW-14</b> 47.89														
1/26/00	38.00	9.89	ND<50	ND<50	ND<500	—	—	1.1	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
5/3/00	36.27	11.62	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
8/3/00	33.44	14.45	—	—	—	—	—	—	—	—	—	—	—	—
10/11/00	33.30	14.59	—	—	—	—	—	—	—	—	—	—	—	—
1/4/2001	33.55	14.34	—	—	—	—	—	—	—	—	—	—	—	—
4/12/01	36.01	11.88	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	1.3
7/10/01	33.52	14.57	—	—	—	—	—	—	—	—	—	—	—	—
11/1/01	Insufficient amount of water to sample													
12/10/01	33.34	14.55	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—	—
3/28/02	39.02	8.87	—	—	—	—	—	—	—	—	—	—	—	—
6/27/02	33.32	14.57	—	—	—	—	—	—	—	—	—	—	—	—
9/11/02	33.27	14.62	—	—	—	—	—	—	—	—	—	—	—	—
3/27/03	42.11	5.78	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—	—
9/23/03	33.29	14.60	—	—	—	—	—	—	—	—	—	—	—	—
3/23/04	37.28	10.61	ND<50	ND<50	ND<170	—	—	ND>0.50	0.68	ND>0.50	ND>0.50	ND>1.0	ND<1.20	1.01
9/22/04	monitoring well can not be located													
3/30/05	41.79	6.10	—	—	—	—	—	—	—	—	—	—	—	—
4/26/05	37.61	10.28	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
<b>MW-15</b> 49.28														
1/26/00	42.26	7.02	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
5/3/00	39.12	10.16	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
8/3/00	35.74	13.54	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
10/11/00	Insufficient amount of water to sample													
1/4/2001	35.03	14.25	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—	—
4/12/01	40.42	8.86	—	—	—	—	—	—	—	—	—	—	—	—
7/10/01	35.58	13.70	—	—	—	—	—	—	—	—	—	—	—	—
11/1/01	Insufficient amount of water to sample													
12/10/01	42.99	6.29	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>3.0	ND>3.0	—	—
3/28/02	41.43	7.85	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>1.0	ND<1.20	1.62	1.8
6/27/02	36.76	12.52	—	—	—	—	—	—	—	—	—	—	—	3.1
9/11/02	34.83	14.45	—	—	—	—	—	—	—	—	—	—	—	—
1/31/03	46.68	2.60	ND<50	ND<50	ND<170	—	—	ND>0.50	ND>0.50	ND>0.50	ND>1.0	ND<1.20	4.6	4.6
3/26/03	37.88	11.40	—	—	—	—	—	—	—	—	—	—	—	3.8
6/19/03	35.18	14.10	—	—	—	—	—	—	—	—	—	—	—	4.2
9/24/03	Well not sampled													

TABLE I: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir (mg/L)	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\text{ng/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-15 Continued</b>														
12/18/03	42.47	6.81	ND<50	ND<50	ND<170	—	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.20	na	na
3/23/04	40.55	8.73	ND<50	ND<50	ND<170	—	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.10	—	—
6/29/04	35.58	13.70	—	—	—	—	—	—	—	—	—	—	—	—
9/23/04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/14/04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>MW-16</b>														
1/26/00	48.58	41.51	7.37	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<3.0	—	—	—
5/3/00	36.77	12.11	14.41	ND<50	ND<50	ND<170	—	3	ND<0.50	ND<0.50	ND<3.0	—	—	—
8/3/00	34.47	34.43	14.45	—	—	—	—	—	—	—	—	—	—	—
10/11/00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1/4/2001	34.61	14.27	10.55	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	1.1
4/12/01	38.33	14.49	14.49	—	—	—	—	—	—	—	—	—	—	—
7/10/01	34.39	14.49	14.49	—	—	—	—	—	—	—	—	—	—	—
11/10/01	34.39	14.49	14.49	—	—	—	—	—	—	—	—	—	—	—
12/10/01	41.86	7.02	8.40	ND<50	ND<50	340	—	—	—	—	—	—	—	—
1/2/02	40.48	14.55	14.55	ND<50	ND<50	ND<170	—	6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	—	—
6/27/02	34.33	14.62	14.62	—	—	—	—	—	—	—	—	—	—	—
9/11/02	34.26	14.62	14.62	—	—	—	—	—	—	—	—	—	—	—
1/31/03	42.93	5.95	ND<50	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—
3/27/03	43.20	5.68	13.15	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	2.6
6/19/03	35.73	14.59	14.59	—	—	—	—	—	—	—	—	—	—	2.55
9/24/03	34.29	14.59	14.59	—	—	—	—	—	—	—	—	—	—	4.4
12/18/03	41.40	7.48	ND<50	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—
3/23/04	38.01	10.87	95	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—
6/29/04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9/23/04	34.38	14.50	11.45	93	ND<50	—	—	—	—	—	—	—	—	—
12/14/04	37.43	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>MW-17S</b>														
10/10/01	30.92	—	—	—	—	—	—	—	—	—	—	—	—	—
11/10/01	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/10/01	27.84	3.08	ND<50	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	4.7
3/28/02	27.94	2.98	—	—	—	720	—	—	—	—	—	—	—	2.49
6/27/02	18.23	12.69	—	—	—	—	—	—	—	—	—	—	—	—
9/11/02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/27/03	28.25	2.67	ND<50	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	4.6
9/23/03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/18/03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/23/04	27.18	3.74	ND<50	ND<50	ND<50	ND<170	—	—	—	—	—	—	—	—
9/22/04	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4/26/05	27.45	3.47	ND<50	ND<50	ND<50	ND<50	—	—	—	—	—	—	—	—

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant  
400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet NAVD88)	Groundwater Elevation (feet NAVD88)	Depth to Water (feet)	Trng ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\text{mg/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\text{ug/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )		
<b>MW-17D</b>	30.82															
10/1/01	14.38	16.44	ND<50	120	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
11/1/01	14.42	16.40	ND<50	ND<50	820	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
12/10/01	23.09	7.73	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	6.4		
3/28/02	21.79	9.03	ND<50	ND<50	1,800	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.18		
6/27/02	16.62	14.20	ND<50	ND<50	310	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	9.9		
9/11/02	14.45	16.37	ND<50	ND<50	360	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.46		
3/21/03	23.25	7.57	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.7		
9/23/03	15.32	15.50	ND<50	ND<50	1,400	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.48		
3/23/04	21.26	9.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
9/22/04	14.85	15.97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
3/30/05	23.34	7.48	---	---	---	---	---	---	---	---	---	---	---	---		
4/26/05	22.49	8.33	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
<b>MW-18</b>	30.82															
10/1/01	14.31	16.51	110	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	DPE = 270		
11/1/01	12.93	17.89	130	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	DPE = 340		
12/10/01	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
3/28/02	26.22	4.6	140	ND<50	360	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	0.84		
6/27/02	16.04	14.78	110	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.6		
9/11/02	13.57	17.25	120	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.41		
3/27/03	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
9/23/03	13.98	16.84	140	ND<50	230	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	DPE = 160 All others ND<1.0-20		
3/23/04	26.10	4.72	66	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	DPE = 99 All others ND<1.0-10		
9/22/04	13.64	17.18	310	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
3/30/05	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	Well inaccessible	---		
<b>MW-19</b>	31.56															
10/1/01	13.23	18.33	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0		
11/1/01	13.50	18.06	ND<50	ND<50	660	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0		
12/10/01	21.32	10.24	13.49	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.5	
3/28/02	18.07	6/27/02	13.62	17.94	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.53
9/11/02	13.21	18.35	ND<50	ND<50	210	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	5.9	
1/31/03	28.16	3.40	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.97	
3/27/03	29.59	1.97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	6.7	
6/19/03	15.70	15.86	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.71	
9/24/03	13.59	17.97	79	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	8.3	
12/18/03	19.23	12.33	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	
3/23/04	17.31	14.25	140	ND<50	190	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	
6/30/04	17.74	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---		
9/23/04	13.19	18.37	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	
12/14/04	22.33	9.23	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	Iron = 200	---	

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.93; CRWQCB Case No. 17HU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHtr (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTEB (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
<b>MW-20</b>	30.69													
10/1/01	13.46	17.23	ND<50	690	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
11/1/01	13.25	17.44	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
12/10/01	24.72	5.97	ND<50	510	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	2	1.73
3/28/02	26.47	4.22	ND<50	380	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	2.8	4.61
6/27/02	15.41	15.28	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
9/11/02	---	---	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
1/31/03	26.19	4.50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	3.5	3.5
3/27/03	27.61	3.08	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	2.25	4.1
6/19/03	17.12	13.57	ND<50	ND<50	210	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
9/24/03	13.76	16.93	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
12/18/03	25.65	5.04	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
3/23/04	20.42	10.27	320	ND<50	180	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-20	---	---
6/30/04	14.94	15.75	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-10	---	---
9/23/04	13.15	17.54	ND<50	ND<50	180	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0-10	---	---
12/14/04	16.23	14.46	ND<50	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	Iron = 6600	---
<b>MW-21</b>	50.99													
3/28/02	50.99	5.97	1,200	190	ND<170	---	11	ND<0.50	1.0	0.80	ND<1.0	ND<1.0-20	0.94	0.94
6/27/02	45.02	8.79	840	170	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.14	2.14
9/11/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3/27/03	46.52	4.47	230	91	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.27	3.27
9/23/03	41.11	9.88	190	150	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---	---
3/23/04	44.04	6.95	ND<50	ND<50	ND<170	----	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---	---
9/22/04	----	----	----	----	----	----	----	----	----	----	----	----	----	----
4/26/05	44.30	6.69	ND<50	ND<50	ND<50	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	----	0.4
<b>MW-22</b>	50.52													
3/28/02	----	----	ND<50	*	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.59
6/27/02	41.73	8.79	----	----	----	----	----	----	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.64
9/11/02	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3/27/03	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9/23/03	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3/23/04	----	----	----	----	----	----	----	----	----	----	----	----	----	----

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRWQCB Case No. [THU]16

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )	
MW-23 1/3/03	53.98	50.42	3.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	35	TAME=18 All others ND	3.32	
3/25/03	49.66	4.32	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	36	TAME=16 All others ND	2.90	
6/19/03	----- Insufficient amount of water to sample -----	44.71	9.27	97	ND<50	ND<170	---	ND<0.50	1.1	ND<0.50	ND<0.50	---	---	---	
9/24/03	----- Insufficient amount of water to sample -----	44.71	9.27	97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	4.6	TAME=1.6 All others ND	---	
12/18/03	49.68	4.30	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<10-20 ND<1-10 ND<1-10	0.82 0.39 0.68	
3/23/04	48.03	5.95	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.2	ND<1.0	---	
6/29/04	46.63	7.35	ND<50	ND<50	ND<50	ND<170	---	0.54	1.9	0.81	ND<0.50	ND<3.0	ND<100	ND<100	
9/23/04	44.18	9.80	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	---	
12/14/04	48.56	5.42	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	---	
MW-24 1/3/04	54.40	50.83	3.57	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.7	ND<1.0-20 ND<1-10	2.55	
3/25/03	51.03	3.37	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.8	ND<1.0-20 ND<1-10	2.87	
6/19/03	47.84	6.56	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.8	ND<1.0-20 ND<1-10	4.2	
9/24/03	45.19	9.21	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	ND<1.0-20 ND<1-10	---	
12/18/03	50.76	3.64	ND<50	ND<50	ND<50	ND<170	---	4.5	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10.0	ND<1.0-20 ND<1-10	0.61
3/23/04	48.93	5.47	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.78	
6/29/04	48.61	5.79	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---	
9/23/04	44.93	9.47	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	ND<100	ND<100	
12/14/04	48.82	5.58	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	ND<100	ND<100	
MW-25 5/31/01	55.91	53.93	1.98	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	2.82	
3/23/03	54.48	1.43	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	2.5	
6/19/03	52.16	3.75	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	1.38	
9/24/03	49.20	6.71	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	0.15	
12/18/03	54.25	1.66	ND<50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	0.64	
3/23/04	53.20	2.71	120	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.24	
6/29/04	50.80	5.11	69	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.70	
9/23/04	47.39	8.52	56	ND<50	ND<50	ND<170	---	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<3.0	ND<100	0.59	
12/14/04	53.27	2.64	470	ND<50	ND<50	ND<170	---	5.3	6.2	ND<0.50	ND<0.50	ND<12	Iron = 15,000	0.37	
MW-26 5/4/04	54.74	50.51	4.23	ND<50	ND<50	ND<170	---	0.98	ND<0.50	ND<0.50	ND<0.50	ND<1.0	TBA=30 All others ND	4.68	
1/31/03	50.90	3.84	ND<50	ND<50	ND<50	ND<170	---	12	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	2.5	
2/10/03	53.26	1.48	ND<50	51	ND<50	ND<170	---	5.4	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	3.24	
3/27/03	45.43	9.31	690	---	ND<50	ND<170	---	2.1	0.53	0.54	ND<0.50	ND<1.0	ND<1.0-20 ND<1-10	0.59	
9/23/03	49.49	5.25	ND<50	ND<50	420	920	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---	
3/23/04	45.48	9.26	ND<50	ND<50	4.91	ND<50	---	1.3	0.65	ND<0.50	ND<0.50	ND<3.0	ND<100	---	
9/22/04	49.83	4.91	ND<50	ND<50	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	ND<100	0.59	
4/26/05	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.03; CRW/QCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg			TPHd			TPHm			TPHr			Benzene (µg/L)			Toluene (µg/L)			Ethybenzene (µg/L)			Total Xylenes (µg/L)			MTBE (µg/L)			Other Analytes (µg/L)			Dissolved Oxygen (mg/L)			
				(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)																	
<b>MW-27</b>	54.30	49.83	4.47	4,400	150	ND<170	—	900	10	0.61	29.3	ND<10	TBA=22	3.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	All others ND	ND<1.0-20	2.85					
1/31/03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	TBA=25	1.41	—						
3/26/03	52.87	1.43	3,800	160	ND<170	ND<170	—	1,100	8.2	25	14.2	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
6/19/03	48.98	5.32	12,000	280	ND<170	ND<170	—	3,800	28	87	38.7	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
9/24/03	48.11	6.19	14,000	270	ND<170	ND<170	—	4,700	26	72	26.8	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
12/18/03	50.38	3.92	4,600	130	ND<170	ND<170	—	3,100	15	42	12.9	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
3/23/04	50.38	3.92	6,800	160	ND<170	ND<170	—	2,300	12	19	10.6	ND<12	ND<12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
6/29/04	48.80	5.50	5,800	270	ND<170	ND<170	—	2,600	18	32	16.8	ND<8.0	ND<8.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
7/20/04	48.07	6.23	2,700	ND<50	—	—	—	810	17	12	ND<5.0	ND<3.0	ND<3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
8/24/04	47.40	6.90	3,700	110	—	—	—	960	17	24	7.2	ND<30	ND<30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
9/23/04	46.47	7.83	2,000	130	—	—	—	280	15	11	6.0	ND<40	ND<40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
10/21/04	48.43	5.87	1,100	89	—	—	—	170	8.2	16	ND<6.0	ND<6.0	ND<6.0	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
11/16/04	49.34	4.96	1,100	120	—	—	—	150	ND<14	8.7	5.1	ND<25	ND<25	ND<25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
12/14/04	49.03	5.27	1,100	100	—	—	—	170	8.2	14	3.2	ND<20	ND<20	ND<20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
1/15/05	48.52	5.78	1,300	98	—	—	—	310	7.6	9.9	ND<6.0	ND<6.0	ND<6.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
2/17/05	49.65	4.65	990	91	—	—	—	60	ND<10	7.4	ND<5.0	ND<5.0	ND<5.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
3/30/05	49.95	4.35	1,300	80	—	—	—	300	7.9	6.8	3.5	ND<30	ND<30	ND<30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
<b>MW-28</b>	54.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1/31/03	47.31	7.30	10,000	120	ND<170	ND<170	—	4,800	14	30	61.9	ND<10	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
3/26/03	53.04	1.57	13,000	470	ND<170	ND<170	—	6,100	24	10	81.8	ND<10	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6/19/03	49.80	4.81	13,000	520	ND<170	ND<170	—	9,700	29	56	45.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9/24/03	47.68	6.93	23,000	250	ND<170	ND<170	—	11,000	33	49	41.6	ND<12	ND<12	ND<12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12/18/03	52.13	2.48	21,000	470	ND<170	ND<170	—	8,900	60	170	98.0	ND<6	ND<6	ND<6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
3/23/04	50.54	4.07	18,000	150	ND<170	ND<170	—	9,600	27	15	24	ND<16	ND<16	ND<16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6/29/04	49.36	5.25	15,000	210	ND<170	ND<170	—	7,600	48	61	46.2	ND<7.0	ND<7.0	ND<7.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7/20/04	48.16	6.45	10,000	76	—	—	—	4,800	28	31	15	ND<30	ND<30	ND<30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8/24/04	46.88	7.73	15,000	180	—	—	—	6,100	43	46	21	ND<100	ND<100	ND<100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9/23/04	45.87	8.74	9,400	82	—	—	—	4,700	34	40	18	ND<80	ND<80	ND<80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10/21/04	49.43	5.18	130	ND<50	—	—	—	53	ND<50	0.90	0.61	ND<3.0	ND<3.0	ND<3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
11/16/04	50.54	4.07	980	71	—	—	—	500	3.6	4.4	3.2	ND<13	ND<13	ND<13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12/14/04	51.71	2.90	1,000	70	—	—	—	350	5.1	7.0	3.8	ND<20	ND<20	ND<20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1/11/05	53.05	1.56	760	84	—	—	—	150	4.9	7.6	3.3	ND<20	ND<20	ND<20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
2/15/05	52.45	2.16	640	75	—	—	—	94	3.3	6.2	2.4	ND<15	ND<15	ND<15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3/30/05	51.39	3.22	780	81	—	—	—	100	4.2	8.5	1.7	ND<20	ND<20	ND<20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS  
 Former Shell Bulk Plant  
 400 Eighth Street, Fortuna  
 LACO No. 4629.03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (mg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-29	55.84													
1/31/03	54.84	1.00	130	ND<170	—	18	1.0	4.1	3.65	ND<1.0	ND<1.0-20	2.8		
3/23/03	54.70	1.14	90	ND<50	—	4.8	ND<50	6.2	1.4	ND<1.0	ND<1.0-20	3.89		
6/19/03	52.32	3.52	130	59	—	8.2	ND<50	6.9	ND<50	ND<1.0	ND<1.0-20	4.7		
9/24/03	49.25	6.59	2,400	140	ND<170	—	840	25	120	14.2	ND<1.0	ND<1.0-20	0.54	
12/18/03	54.32	1.52	400	ND<50	ND<170	—	110	3.4	15	5.1	ND<1.0	ND<1.0-20	0.47	
3/23/04	53.39	2.45	63	ND<50	ND<170	—	2.4	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	0.16	
6/29/04	51.09	4.75	230	ND<50	ND<170	—	80	1.4	3.4	0.79	ND<3.0	—	1.59	
9/23/04	48.60	7.24	3,400	84	—	—	1,900	29	16	20	ND<35	—	0.51	
12/14/04	53.03	2.81	ND<49	ND<50	—	—	0.69	ND<0.50	ND<0.50	ND<0.50	ND<30	ND<100	—	
MW-30	55.09													
1/31/03	50.99	4.10	48,000	570	ND<170	—	13,000	210	2,000	1,810	ND<1.0	ND<1.0-20	2.6	
3/26/03	54.77	0.32	33,000	430	ND<170	—	13,000	150	1,200	714	ND<50	ND<50-1,000	2.69	
6/19/03	51.68	3.41	29,000	710	ND<170	—	12,000	150	1,300	753	ND<4.0	ND<1.0-20	2.2	
9/24/03	48.08	7.01	34,000	550	ND<170	—	14,000	150	540	416	ND<50	ND<50-1,000	1.14	
12/18/03	53.56	1.53	39,000	220	ND<170	—	16,000	140	790	523	ND<50	ND<50-1,000	0.52	
3/23/04	52.68	2.41	2,300	170	ND<170	—	7,600	110	830	409	ND<4.0	ND<1.0-10	0.22	
6/29/04	50.47	4.62	29,000	860	ND<170	—	10,000	250	880	507	ND<360	—	0.79	
7/20/04	49.32	5.77	31,000	280	—	—	9,400	230	840	437	ND<300	—	0.57	
8/24/04	47.62	7.47	33,000	310	—	—	10,000	190	630	273	ND<300	F-Hydde = 59	1.30	
9/23/04	46.60	8.49	20,000	370	—	—	6,200	150	470	576	ND<300	A-Hydde = 32	—	
10/21/04	50.57	4.52	31,000	590	—	—	9,100	300	1,400	870	ND<300	Ct = ND<10	—	
11/16/04	51.04	4.05	30,000	740	—	—	9,200	320	2,000	930	ND<300	—	0.32	
12/14/04	52.41	2.68	26,000	840	—	—	7,300	270	1,300	810	ND<300	Iron = 21,000	0.58	
1/11/05	54.36	0.73	25,000	600	—	—	8,100	310	1,200	920	ND<300	Iron = 17,000	0.22	
2/15/05	53.84	1.25	22,000	770	—	—	6,100	200	890	670	ND<300	—	0.41	
3/30/05	54.52	0.57	18,000	580	—	—	5,600	180	800	590	ND<300	—	0.43	
MW-31	54.61													
1/31/03	49.96	4.65	3,800	650	300	—	1,000	9.0	2.3	3.9	ND<1.0	ND<1.0-20	5.05	
3/27/03	52.21	2.40	3,200	1,100	500	—	910	9.7	3.2	3.33	ND<1.0	ND<1.0-20	3.75	
9/23/03	44.78	9.83	7,900	270	ND<170	—	800	9.4	3.3	5.5	ND<1.0	ND<1.0-20	0.0	
3/23/04	49.27	5.34	2,700	210	ND<170	—	840	6.7	ND<0.50	4.5	ND<1.0	ND<1.0-10	0.55	
9/22/04	42.89	11.72	3,200	190	ND<170	—	940	24	6.9	7.5	ND<30	—	0.30	
3/30/05	52.49	2.12	1,100	82	ND<170	—	240	ND<20	ND<5.0	ND<5.0	ND<8.0	ND<12	0.44	
4/26/05	49.65	4.96	1,000	83	—	—	270	7.9	ND<5.0	ND<5.0	ND<7.0	ND<12	0.49	
MW-32	54.63													
1/31/03	47.67	6.96	4,800	91	ND<170	—	1,500	12	1.6	5.2	ND<1.0	ND<1.0-20	4.38	
3/27/03	52.21	2.42	2,900	110	ND<170	—	930	9.3	1.0	2.8	ND<1.0	ND<1.0-20	2.74	
9/23/03	44.78	9.85	5,500	120	180	—	620	7.0	2.4	3.46	ND<1.0	ND<1.0-20	0.00	
3/23/04	49.26	5.37	1,100	53	ND<170	—	430	2.3	0.70	0.51	ND<1.0	ND<1.0-20	0.78	
9/22/04	41.95	12.68	1,400	72	ND<170	—	450	ND<1.5	4.0	ND<12.5	ND<10	ND<10	0.30	
3/30/05	52.14	2.49	2,000	160	ND<170	—	680	13.0	ND<10	ND<15.0	ND<20	ND<12	0.32	
4/26/05	50.34	4.29	2,400	150	—	—	630	15	ND<12	ND<12	ND<20	ND<12	0.57	

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**  
 Former Shell Bulk Plant  
 400 Eighth Street, Fortuna  
 LACO No. 4629.03; CRWQCB Case No. 17HU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	Analytical Results						Dissolved Oxygen (mg/L)
				TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHfir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )
<b>MW-33</b>	55.79									
1/31/03	51.24	4.55	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
3/25/03	54.39	1.40	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
6/19/03	52.16	3.63	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
9/24/03	49.20	6.59	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
12/18/03	54.24	1.55	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
3/23/04	53.21	2.58	88	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
6/29/04	50.78	5.01	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
9/23/04	47.36	8.43	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
12/14/04	53.46	2.33	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<1.0	ND<1.0
<b>MW-34</b>	54.07									
1/31/03	49.07	5.00	15,000	120	ND<170	—	690	970	110	1,090
3/25/03	49.02	5.05	14,000	190	ND<170	—	380	580	440	730
6/19/03	46.17	7.90	4,500	320	ND<170	—	300	200	260	242
9/24/03	42.40	11.67	8,200	360	ND<170	—	450	76	360	197
12/18/03	48.56	5.51	9,100	200	ND<170	—	400	320	380	350
3/23/04	47.18	6.89	9,100	240	ND<170	—	460	230	400	295
6/29/04	46.62	7.45	11,000	530	ND<170	—	540	200	640	505
7/26/04	43.54	10.53	9,100	230	ND<170	—	490	120	380	220
8/24/04	42.35	11.72	11,000	320	ND<170	—	490	84	390	248
9/23/04	41.79	12.28	7,700	250	ND<170	—	—	390	63	200
10/21/04	46.53	7.54	8,200	260	ND<170	—	—	260	99	160
11/16/04	47.82	6.25	8,500	340	ND<170	—	—	250	110	170
12/14/04	47.58	6.49	4,100	260	ND<170	—	—	160	73	130
1/11/05	51.26	2.81	5,300	380	ND<170	—	—	170	69	130
2/15/05	48.61	5.46	3,400	310	ND<170	—	—	120	39	120
3/30/05	51.43	2.64	5,500	190	ND<170	—	—	95	58	120
<b>MW-35</b>	54.46									
1/31/03	50.01	4.45	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	13
3/25/03	50.48	3.98	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	10
6/19/03	47.64	6.82	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	15
9/24/03	44.19	10.27	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	13
12/18/03	50.39	4.07	ND<50	ND<50	ND<170	—	1.2	ND<0.50	ND<0.50	11
										All others ND

TABLE I: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/03; CRWQCB Case No. 11THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
<b>MW-35 Continued</b>														
3/23/04	48.68	5.78	84	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	TAME=2.1 All others ND<1.0	0.19
6/29/04	48.28	6.18	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	---	0.54
9/23/04	43.52	10.94	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	---	0.32
12/14/04	49.21	5.25	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	11	Iron = 3,600	---
<b>MW-36</b>														
1/31/03	40.25	14.25	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.8	TAME=1.9 All others ND	3.71
3/25/03	50.95	3.55	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.9	ND<1.0-20	2.28
6/19/03	47.58	6.92	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.5	ND<1.0-20	0.56
9/24/03	44.19	10.31	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.5	TAME=1.6 All others ND	0.00
12/18/03	50.43	4.07	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.2	ND<1.0-20	---
3/23/04	48.76	5.74	86	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.0	ND<1.0-10	0.58
6/29/04	48.21	6.29	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.0	---	0.68
9/23/04	43.01	11.49	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	---	0.31
12/14/04	49.11	5.39	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.7	Iron = 1,300	---
<b>MW-37</b>														
1/31/03	44.57	11.28	1,100	51	ND<170	---	74	3.3	18	39.8	ND<1.0	ND<1.0-20	5.56	
3/25/03	53.48	2.37	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.6	ND<1.0-20	2.78
6/19/03	51.90	3.95	ND<50	ND<50	ND<170	---	11	0.53	4.8	ND<6.0	ND<6.0	ND<1.0-20	---	
9/24/03	48.72	7.13	420	ND<50	ND<170	---	2.9	ND<0.50	0.89	0.80	3.4	ND<1.0-20	0.33	
12/18/03	53.71	2.14	92	ND<50	ND<170	---	2.8	ND<0.50	0.98	0.63	4.3	ND<1.0-10	0.80	
3/23/04	52.97	2.88	120	ND<50	ND<170	---	3.4	ND<0.50	ND<0.50	ND<0.50	ND<13	---	0.46	
6/29/04	51.40	4.45	ND<50	ND<50	ND<170	---	1.5	ND<0.50	ND<0.50	ND<0.50	ND<10	---	0.58	
9/23/04	46.68	9.17	ND<50	ND<50	ND<170	---	0.88	ND<0.50	ND<0.50	ND<0.50	ND<5.1	ND<100	0.16	
12/14/04	53.70	2.15	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	0.45	
<b>MW-38</b>														
1/31/03	53.99	1.82	7,100	280	ND<170	---	2,100	41	180	134	ND<1.0	ND<1.0-20	3.40	
3/25/03	54.10	1.71	1,300	79	ND<170	---	99	ND<2.5	25.5	ND<20	ND<5.0-100	ND<5.0-100	2.25	
6/19/03	51.82	3.99	3,000	160	ND<170	---	1,300	16	37	39.4	12	TBA=32	3.8	
9/24/03	48.56	7.25	680	62	ND<170	---	130	2.1	7.0	3.52	11	All others ND	---	
12/18/03	53.81	2.00	980	ND<50	ND<170	---	330	6.5	28.0	12.10	11	ND<1.0-20	0.31	
3/23/04	52.86	2.95	640	ND<50	ND<170	---	150	2.7	9.9	5.1	12	ND<1.0-20	0.40	
6/29/04	50.67	5.14	140	ND<50	ND<170	---	21	ND<1.8	0.70	0.70	14	---	0.89	
7/20/04	49.48	6.33	270	56	ND<50	---	40	ND<3.0	1.4	0.74	14	---	0.64	
8/24/04	47.90	7.91	94	ND<50	ND<170	---	10	ND<1.0	0.66	0.50	11	---	3.28	
9/23/04	46.55	9.26	ND<50	ND<50	ND<170	---	1.6	ND<0.50	ND<0.50	ND<0.50	10	F-Hyd = ND<5.0 A-Hyd = ND<5.0 Cr = ND<10	0.85	

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna  
LACO No. 4629/03; CRWQCB Case No. 17HU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	TPHd ( $\mu\text{g/L}$ )	TPHmo ( $\mu\text{g/L}$ )	TPHir ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Other Analytes ( $\mu\text{g/L}$ )	Dissolved Oxygen ( $\text{mg/L}$ )
<b>MW-38 Continued</b>														
10/21/04	49.19	6.62	83	ND<50	—	—	11	ND<1.0	ND<0.50	0.50	12	—	—	0.55
11/16/04	50.68	5.13	82	ND<50	—	—	12	0.60	ND<0.50	0.58	11	—	—	2.87
12/14/04	52.54	3.27	72	ND<50	—	—	13	0.54	ND<0.50	ND<0.50	11	Iron = 150	2.78	—
1/11/05	54.52	1.29	270	ND<50	—	—	80	2.3	2.1	1.5	17	Iron = 210	1.12	0.38
2/15/05	53.97	1.84	250	ND<50	—	—	47	2.1	2.0	2.0	12	—	—	0.66
3/30/05	54.65	1.16	200	ND<50	—	—	28	1.5	1.3	1.2	14	—	—	0.38
<b>MW-39</b> 55.24														
1/31/03	41.37	13.87	Did not sample, bailer dropped into well	—	—	—	—	—	—	—	—	—	—	4.79
2/10/03	44.34	10.90	760	53	ND<170	—	40	0.53	ND<0.50	2.9	38.7	17	ND<1.0-20	3.5
3/26/03	50.08	5.16	350	ND<50	ND<170	—	21	ND<0.50	ND<0.50	9.8	12	ND<1.0-20	4.08	—
6/19/03	51.24	4.00	1,600	ND<50	ND<170	—	22	ND<0.50	1.8	ND<0.50	16	NE<1.0-20	—	—
9/24/03	47.37	7.87	890	ND<50	ND<170	—	9.3	ND<0.50	1.7	0.72	12	ND<1.0-20	0.52	—
12/18/03	53.21	2.03	140	ND<50	310	—	17.0	ND<0.50	1.4	0.88	13	NE<1.0-20	0.57	—
3/23/04	52.20	3.04	170	ND<50	170	—	4.7	ND<0.50	0.95	0.56	18	ND<1.0-10	0.85	—
6/29/04	50.14	5.10	57	ND<50	ND<170	—	7.9	ND<0.50	1.5	0.88	17	—	0.29	—
9/23/04	46.56	8.68	ND<50	ND<50	—	—	4.3	ND<0.50	0.83	0.62	14	—	0.14	—
12/14/04	51.39	3.85	ND<50	ND<50	—	—	1.6	ND<0.50	0.51	ND<0.50	13	Iron = 10,000	0.51	—
<b>MW-40</b> 55.17														
1/31/03	43.75	11.42	120	92	ND<170	—	1.4	ND<0.50	ND<0.50	ND<0.50	21	ND<1.0-20	4.51	—
3/26/03	53.39	1.58	ND<50	77	ND<170	—	7.8	ND<0.50	0.71	ND<0.50	16	ND<1.0-20	3.69	—
6/19/03	51.36	3.81	220	ND<50	ND<170	—	110	ND<0.50	2.3	0.63	27	ND<1.0-20	0.25	—
9/24/03	47.73	7.44	170	ND<50	ND<170	—	60	ND<0.50	ND<0.50	ND<0.50	20	ND<1.0-20	0.83	—
12/18/03	52.45	2.72	150	ND<50	ND<170	—	34	ND<0.50	1.4	1.0	15	ND<1.0-20	0.84	—
3/23/04	52.35	2.82	120	ND<50	ND<170	—	6.8	ND<0.50	ND<0.50	ND<0.50	20	ND<1.0-46	0.31	—
6/29/04	48.77	6.40	74	ND<50	ND<170	—	17	ND<0.50	1.4	ND<3.7	19	—	1.10	—
9/23/04	46.27	8.90	ND<50	ND<50	—	—	8.3	ND<0.50	ND<0.50	ND<0.50	14	—	—	—
12/14/04	50.95	4.22	ND<50	ND<50	—	—	0.76	ND<0.50	ND<0.50	ND<0.50	11	Iron = 16,000	—	—
<b>MW-41</b> 54.38														
2/10/03	50.98	3.40	ND<50	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.8	ND<1.0-20	3.2	—
3/26/03	53.08	1.30	ND<50	ND<50	ND<170	—	2.2	ND<0.50	ND<0.50	ND<0.50	4.7	ND<1.0-20	3.51	—
6/19/03	49.80	4.58	120	ND<50	ND<170	—	38	ND<0.50	ND<0.50	ND<0.50	10	TBA=22	4.48	—
<b>MW-42</b> 54.37														
1/31/03	51.72	2.65	140	ND<50	ND<170	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.9	ND<1.0-20	4.6	—
3/26/03	52.94	1.43	72	ND<50	ND<170	—	0.81	ND<0.50	ND<0.50	ND<0.50	5.4	ND<1.0-20	3.16	—
6/19/03	49.80	4.57	700	ND<50	ND<170	—	230	ND<0.50	ND<0.50	ND<0.50	7.8	TBA=41	4.17	All others ND

**TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPhg (µg/L)	TPhd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
<b>MW-42 Continued</b>														
9/24/03	46.84	7.53	480	ND<50	ND<170	---	230	0.75	0.64	ND<0.50	6.5	TBA=31	0.43	
12/18/03	51.96	2.41	230	ND<50	ND<170	---	80	0.67	ND<0.50	ND<0.50	6.2	All others ND	---	
3/23/04	50.46	3.91	300	ND<50	ND<170	---	62	0.54	ND<0.50	ND<0.50	7.2	ND<1.0-20	0.68	
6/29/04	49.54	4.83	240	ND<50	ND<170	---	51	ND<1.8	ND<2.0	ND<1.5	ND<20	ND<1.0-40	0.41	
9/23/04	46.11	8.26	150	ND<50	ND<170	---	19	ND<0.50	ND<2.0	ND<1.5	ND<20	---	1.40	
12/14/04	51.00	3.37	66	ND<50	ND<170	---	3.2	ND<0.50	ND<0.50	ND<0.50	ND<12	Iron = 21,000	0.43	
<b>MW-43</b>														
2/10/03	54.61	50.71	3.90	43,000	98	260	---	17,000	3.3	ND<0.50	37	ND<1.0	TBA=64	
3/26/03	52.86	1.75	44,000	65	400	---	11,000	2.3	2.0	25.3	ND<20	All others ND	2.9	
6/19/03	50.64	3.97	17,000	ND<50	ND<170	---	11,000	1.7	4.9	16.8	ND<30	All others ND	2.79	
9/24/03	46.80	7.81	3,300	ND<50	ND<170	---	4,000	1.3	2.9	2.9	9.4	TBA=71	---	
12/18/03	52.00	2.61	1,500	85	ND<170	---	230	ND<0.50	1.7	1.2	11.0	All others ND	1.46	
3/23/04	51.09	3.52	910	51	ND<170	---	400	ND<0.50	0.68	1.0	12	TBA=42	0.81	
6/29/04	48.46	6.15	1,900	ND<50	ND<170	---	1,100	1.2	4.2	3.7	ND<60	All others ND<1.0	1.05	
7/20/04	48.10	6.51	2,500	ND<50	ND<170	---	2,000	ND<5.0	ND<5.0	ND<5.0	ND<30	---	1.40	
8/24/04	45.95	8.66	12,000	ND<50	ND<170	---	5,700	18	23	13.5	ND<30	---	1.54	
9/23/04	45.21	9.40	3,800	ND<50	ND<170	---	1,500	ND<7.0	29	4.5	ND<130	F-Hyde = 15	2.19	
10/21/04	49.54	5.07	410	ND<50	ND<170	---	260	ND<0.50	0.80	0.83	ND<30	A-Hyde = 16	Cr = ND<10	
11/16/04	50.41	4.20	870	62	ND<50	ND<170	360	1.1	6.2	2.0	ND<50	---	0.48	
12/14/04	51.89	2.72	1,000	ND<50	ND<170	---	270	1.2	0.91	2.6	ND<70	ND<100	---	
1/11/05	52.98	1.63	350	ND<50	ND<170	---	ND<6.0	ND<2.0	ND<0.50	0.60	ND<100	ND<100	0.14	
2/15/05	52.12	320	ND<50	ND<170	ND<170	---	ND<4.0	ND<1.5	ND<0.50	ND<40	ND<80	ND<40	0.28	
3/30/05	52.55	2.49	650	ND<50	ND<170	---	120	ND<2.0	1.6	1.6	ND<80	ND<80	0.35	
<b>MW-44</b>														
2/10/03	54.65	51.15	3.50	54,000	180	ND<170	---	22,000	92	30	78	ND<1.0	TBA=59	
3/26/03	53.04	1.61	23,300	100	ND<170	---	11,000	26	59	ND<25	ND<50	All others ND	3.2	
6/19/03	50.52	4.13	6,100	61	ND<170	---	3,800	16	50	9.3	ND<3.0	ND<50-1,000	3.86	
9/24/03	46.64	8.01	4,900	ND<50	ND<170	---	7,100	19	30	7.0	7.1	TBA=34	3.91	
12/18/03	52.78	1.87	4,200	ND<50	ND<170	---	5,700	6.4	24	4.5	5.0	All others ND	1.60	
3/23/04	51.23	3.42	5,600	ND<50	ND<170	---	2,800	3.6	18	4.1	ND<6.0	ND<1.0-20	0.76	
6/29/04	48.45	6.20	11,000	81	ND<170	---	6,000	26	30	16.7	ND<60	ND<1.0-30	0.42	
7/20/04	47.98	6.67	12,000	ND<50	ND<170	---	6,500	22	27	14.6	ND<60	---	0.28	
8/24/04	47.11	7.54	2,700	53	ND<170	---	2,100	ND<5.0	ND<5.0	ND<5.0	ND<70	ND<70	0.51	
														2.59

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
<b>MW-44 Continued</b>														
9/23/04	45.75	8.90	8,800	69	—	—	—	4,600	14	32	13.4	ND<60	F-Hyde = 5.5 A-Hyde = 5.1	2.04
10/21/04	49.53	5.12	3,500	59	—	—	—	1,600	4.7	3.7	6.8	ND<40	Cr = ND<10	0.27
11/16/04	50.63	4.02	3,100	72	—	—	—	1,700	6.6	8.4	9.6	ND<60	—	0.56
12/14/04	51.76	2.89	3,000	56	—	—	—	1,400	4.7	5.6	6.5	ND<40	Iron = 3,500	0.29
1/11/05	53.66	0.99	4,000	57	—	—	—	2,200	7.1	1.6	9.0	ND<80	Iron = 4,600	0.36
2/15/05	52.10	2.55	2,900	55	—	—	—	1,400	4.8	2.3	6.0	ND<50	—	0.36
3/30/05	53.26	1.39	3,600	ND<20	—	—	—	1,800	6.7	4.3	7.1	ND<70	—	0.39
<b>Duplicate Samples</b>														
<b>MW-13</b>														
1/4/2001	6,800	—	—	—	—	—	—	580	340	300	281	4.4	—	—
<b>MW-13</b>														
4/12/01	240	—	—	—	—	—	—	35	2.9	4.2	8.06	ND<0.50	—	—
<b>MW-6</b>														
7/10/01	ND<50	—	—	—	—	—	—	ND<0.50	ND<0.50	ND<0.50	ND<0.50	32	—	—
<b>MW-19</b>														
11/1/01	ND<50	—	—	—	—	—	—	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	—	—
<b>MW-9</b>														
11/1/01	900	—	—	—	—	—	—	330	3.1	0.60	0.72	ND<1.0	ND<1.0-20	—

## NOTES:

feet msl - feet above mean sea level

TPHg - total petroleum hydrocarbons as gasoline

TPHd - total petroleum hydrocarbons as diesel

TPHmo - total petroleum hydrocarbons as motor oil

TPHir - total petroleum hydrocarbons by infrared method

Xylenes - total is reported from m,p-xylene and o-xylene.

Other analyses include the Fuel Oxygenates:

MTBE - methyl tertiary butyl ether

DIBE - di-isopropyl ether

ETBE - ethyl tertiary butyl ether

TBA - tertiary butyl alcohol

TAME - tertiary amyl methyl ether

A-Hyde - Acetaldehyde

F-Hyde - Formaldehyde

Cr - Dissolved Chromium

COD - Chemical oxygen demand

All results reported in micrograms per liter (µg/L)

ND&lt;50 - non-detect at reporting limits shown

— = sample not analyzed for parameter

\* - sample broken in laboratory and not analyzed

**TABLE 2: DECAY RATES FOR BENZENE AND TPHG**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO No. 4629.02, CRWQCB Case No. 1THU116

<b>Comparisons of Decay Rates (k) days</b>				
MW ID	Derived from		Literature**	
	Chart	Analyticals	slow	fast
<b>TPHg*</b>				
MW31	0.00167	0.00145	0.001031	0.0062
MW32	0.00149	0.0005	0.001031	0.0062
<b>Benzene</b>				
MW31	0.00149	0.00182	0.00095	0.0062
MW32	0.0008	0.00043	0.00095	0.0062

\* TPHg literature decay rates are based on cyclohexane decay rates.

\*\*Values for decay rates taken from "Handbook of Environmental Degradation Rates", Howard, P.H.; Boethling, R.S.; et al.

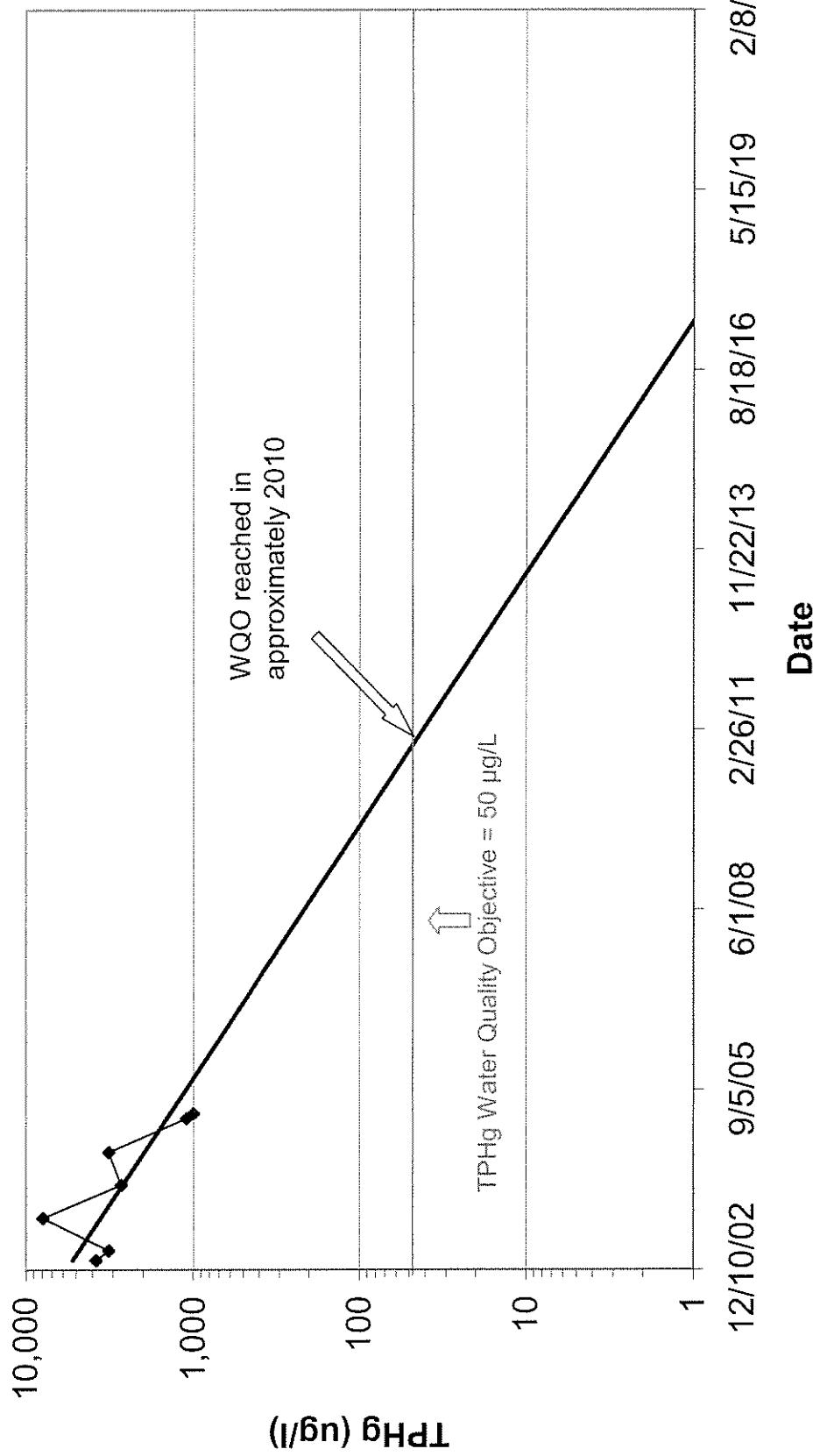
## Worksheet 1: Decay Rates in Monitoring Wells MW31 and MW32, Derived from Analytical Results

Former Shell Bulk Plant  
400 Eighth Street, Fortuna  
LACO Project No. 4629.02, CRW/QC8 Case No. 1THU116

Monitoring Well ID / Constituent	Concentration Final (CF) ( $\mu\text{g/L}$ )	(CF) Date	Concentration Initial ( $\mu\text{g/L}$ )	(CI) Date	time (t) days between CF and CI	$k = \text{decay rate constant (days)}$	Using Decay rate ( $k$ ), Obtain (t in days) to reach WQO			year WQO reached
							WQO TPHg ( $\mu\text{g/L}$ )	WQO 50 ( $\mu\text{g/L}$ )	WQO Benzene ( $\mu\text{g/L}$ )	
TPHg	MW 31	1100	3/30/2005	3200	3/27/2003	734	0.00145	2125		2011
	MW 32	2000	3/30/2005	2900	3/27/2003	734	0.0005	7287		2025
<b>BENZENE</b>										
MW31	240	3/30/2005	910	3/27/2003	734	0.00182	3018		2013	
MW32	680	3/30/2005	930	3/27/2003	734	0.00043	15290		2047	

**CHART 1: TPHg CONCENTRATIONS AND TREND LINE FOR MONITORING WELL MW31**

Former Shell Bulk Plant  
400 Eighth Street, Fortuna, California  
CRWQCB Case No. 1THU116; LACO Project No. 4629.02



## CHART 2: TPHg CONCENTRATIONS AND TREND LINE FOR MONITORING WELL MW32

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO Project No. 4629.02, CRWQCB Case No. 1THU116

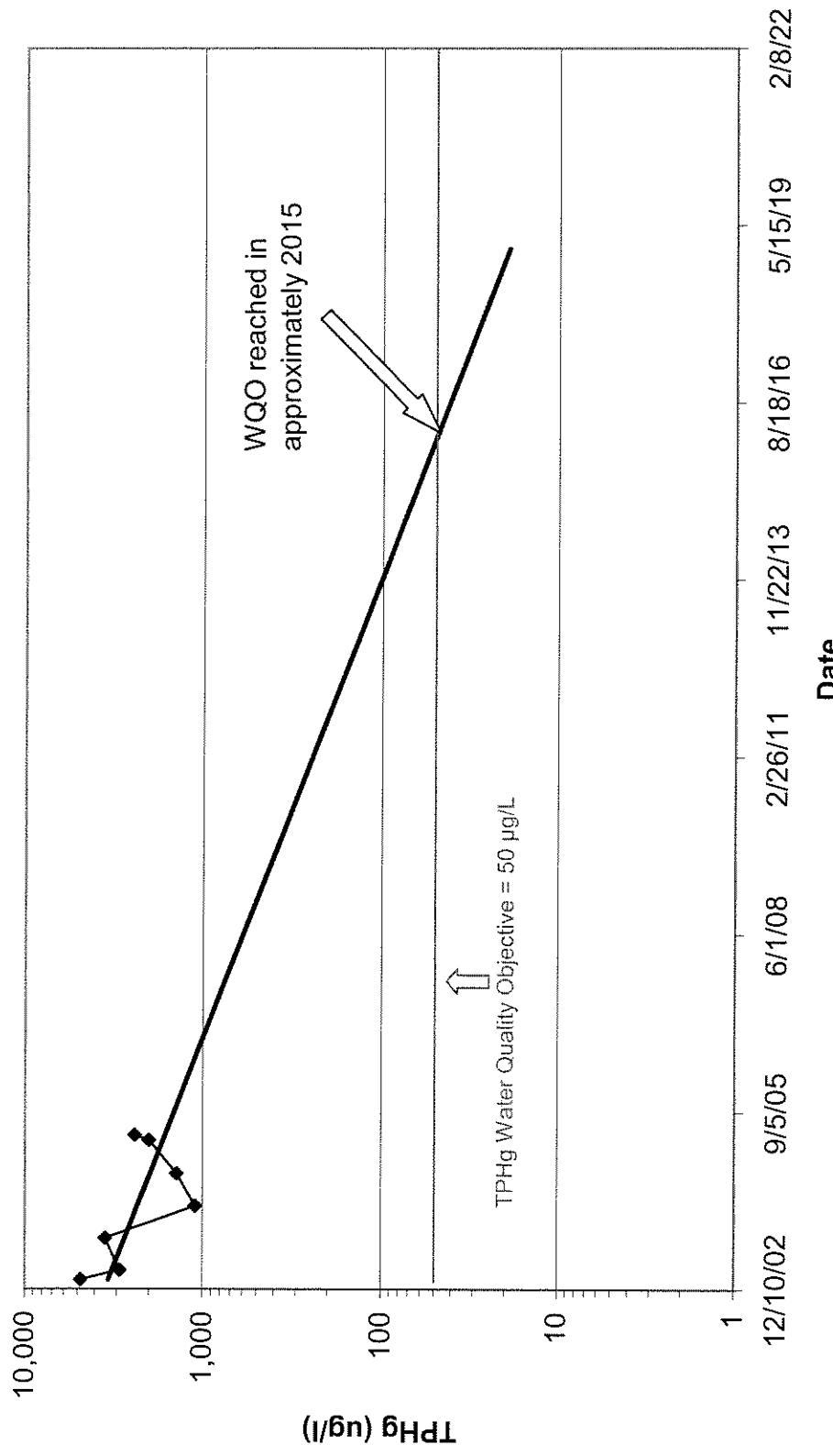


Chart 2

**CHART 3: BENZENE CONCENTRATIONS AND TREND LINE IN MONITORING WELL MW31**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO Project No. 4629.02, CRWQCB Case No. 1THU116

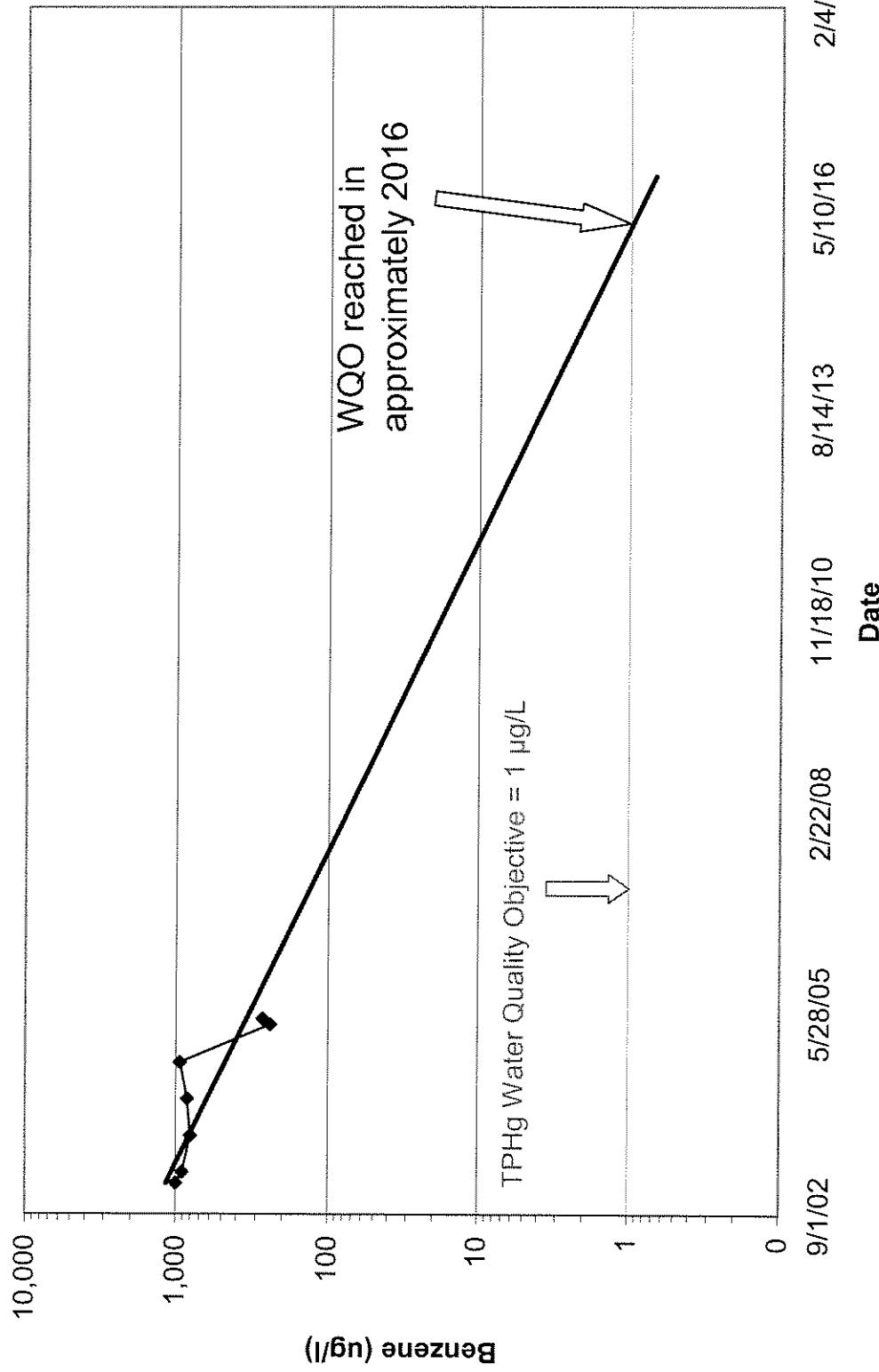


Chart 3

**CHART 4: BENZENE CONCENTRATIONS AND TREND LINE FOR MONITORING WELL MW32**

Former Shell Bulk Plant

400 Eighth Street, Fortuna

LACO Project No. 4629.02, CRWQCB Case No. 1THU116

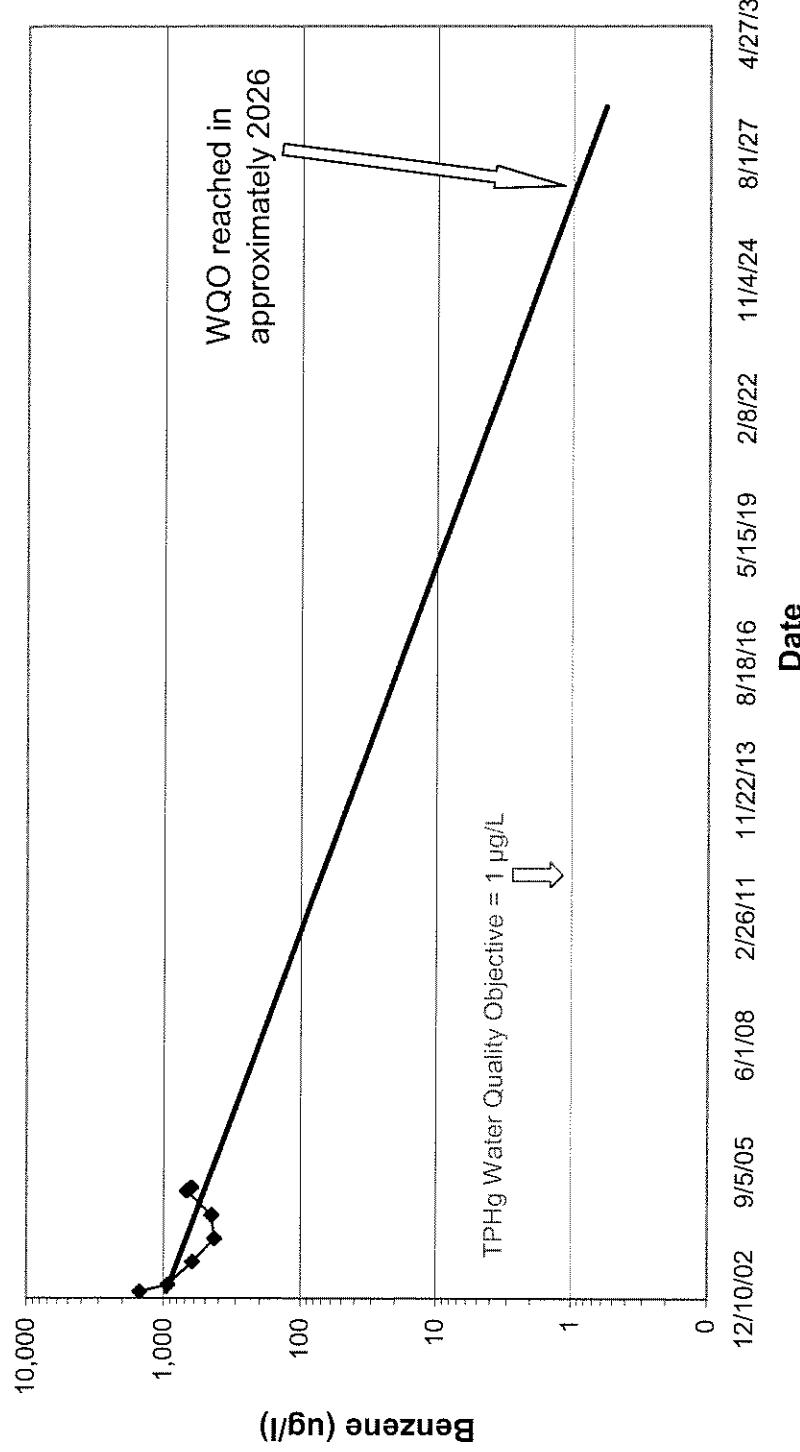


Chart 4

# *Attachment 1*



Project Name: Bulk Plant - HPI (AST)  
 Project No.: 4629.02  
 Date: 3-30-05  
 Global ID No.: T0602391121  
 PM: CJW

Tech: SJD  
 Mob/Demob time: 25/25  
 Travel time: .75  
 Time on site: 7:35  
 Time off site: 10:30  
 Mileage: 18

WELL No.	MW3	MW18	MW31	MW32	
DIAMETER (in)	4.00	1.50	1.50	1.50	
SCREENED INTERVAL (ft)	3-20	18.5-21.5	14-15.5	16.5-18	
DEPTH TO WATER (ft)	2.23	—	2.12	2.49	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL
pH					
TEMP (°C)					
Ecw (μmhos)					
ORP (mV)	UR	0	UR	UR	UR
DO (mg/L)	1.87	0.51	1.45	0.44	1.20
OTHER (units)	—	—	—	—	—
	TIME	9:01	9:21	9:44	9:52
PURGE	METHOD (DHP/CB/B)	DHP		DHP	DHP
	RATE (Lpm)	0.20		0.16	0.18
	VOLUME (L)	4.0		1.30	1.40
SAMPLE	COLOR	CLEAR	SLIGHT ORANGE TINT CLOUDY	LT. GREY CLOUDY	LT. GREY CLOUDY
	ODOR	LIGHT RUBBER/FUEL		MED. FUEL	MEDI. FUEL
	INTAKE DEPTH (FEET)	12.0		14.5	17.5
	TIME	9:22		9:53	10:20
	METHOD (DHP/CB/B)	DHP		DHP	DHP
	ANALYTICS	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC
	TOTAL DRAWDOWN (FEET)	0.57	—	2.06	0.90
	REMARKS	ALL 3 BOLT HOLES STRIPPED	COULD NOT GET TO WELL	good	good
	WASTE DRUMS				

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Bulk Plant - HPI (AST)**

Project No.: **4629.02**

Date: **3-30-05**

Global ID No.: **T0602391121**

PM: **CJW**

Tech: **SJD**

Mob/Demob time: **125 / 125**

Travel time: **.75**

Time on site: **7:35**

Time off site: **10:30**

Mileage: **18**

	MW10	MW11	MW14	MW17D		
WELL No.:						
DIAMETER (in)	2.00	1.00	1.00	1.50		
SCREENED INTERVAL (ft)	3-18	2-14	6-15	22.5-27.5		
DEPTH TO WATER (ft)	3.71	8.72	6.10	7.48		
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH					
	TEMP (°C)					
	E <sub>CEC</sub> (μmhos)					
	ORP (mV)					
PURGE	DO (mg/L)					
	OTHER (units)					
	TIME					
	METHOD (DHP/CB/B)					
	RATE (Lpm)					
	VOLUME (L)					
SAMPLE	COLOR					
	ODOR					
	INTAKE DEPTH (FEET)					
	TIME					
	METHOD (DHP/CB/B)					
	ANALYTES	DTW ONLY	DTW ONLY	DTW ONLY	DTW ONLY	
TOTAL DRAWDOWN (FEET)	DTW ONLY					
	REMARKS					
WELL CONDITION	good	NO CAP ON WELL	good	good		
WASTE DRUMS						

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

Project Name: BULK PLANT - HPI (AST)  
Project No.: 4629.02

Tech: SJD  
Date: 3-30-05

WELL ID:	METER ACCURACY RANGE					WELL ID: mw3 CONT.						
mw3	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmhos	+/- 2 mv	+/- 0.3 mg/L	TIME	pH	TEMP (°C)	Ecw (µmhos)	ORP (mV)	DO (mg/L)	
TIME	pH	TEMP (°C)	Ecw (µmhos)	ORP (mV)	DO (mg/L)	9:21	~	~	~	0	0.51	
9:03	~	~	~	-93	1.94							
9:05	~	~	~	-90	1.05							
9:07	~	~	~	-80	0.78							
9:09	~	~	~	-61	0.68							
9:11	~	~	~	-48	0.60							
9:13	~	~	~	-31	0.60							
9:15	~	~	~	-21	0.60							
9:17	~	~	~	-4	0.53							
9:19	~	~	~	-1	0.52							

WELL ID: mw31

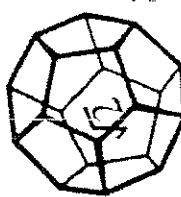
WELL ID: mw32

WELL ID:

WELL ID:

Project Name: Bulk Plant - API (nST)  
Project No.: 4629.02

Tech: SJD  
Date: 3-30-05



NORTH COAST  
LABORATORIES LTD.

6680 West End Road • Arcata • CA 95521 9202  
707-822-4649 fax 707-822-5831

## Chain of Custody

\***MATRIX**: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.



Project Name: **Bulk Plant - HPI (AST)**  
Project No.: **4629.02**  
Date: **4-26-05**  
Global ID No.: **T0602391121**  
PM: **CJW**

Tech: **SJD**  
Mob/Demob time: **.50 / .25**  
Travel time: **1.0**  
Time on site: **8:00**  
Time off site: **2:10**  
Mileage: **36**

WELL No.	MW3	MW7	MW9	MW10	MW11
DIAMETER (in)	4.00	4.00	2.00	2.00	1.00
SCREENED INTERVAL (ft)	3-20	6-25	3-18	3-18	2-14
DEPTH TO WATER (ft)	6.29	5.88	8.56	7.36	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL
pH					
TEMP (°C)					
Ecw (μmhos)					
ORP (mV)	-12	56	-39	-25	-66
DO (mg/L)	1.23	0.42	1.23	0.65	1.19
OTHER (units)					
TIME	9:57	10:05	8:52	9:00	1:21
METHOD (DHP/CB/B)	DHP	DHP	DHP	DHP	
RATE (Lpm)	0.19	0.19	0.20	0.20	
VOLUME (L)	1.50	1.50	1.60	2.0	
COLOR	CLEAR	CLEAR	CLEAR	LT. BROWN CLOUDY	CLEAR CLOUDY
ODOR	LIGHT RUBBER / FUEL	MED. RUBBER / FUEL	LIGHT FUEL	LIGHT SULFUR	
INTAKE DEPTH (FEET)	12.0	15.0	12.0	11.0	
TIME	10:07	9:02	1:31	9:33	
METHOD (DHP/CB/B)	DHP	DHP	DHP	DHP	
ANALYTICS	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC
TOTAL DRAWDOWN (FEET)	0.37	0.42	0.73	0.66	
REMARKS			FD-MB NEW 2" CAP		
WELL CONDITION	good	good	NO LOCK ON WELL COVER ~ NO WELL PLUG	good	
WASTE DRUMS	1 DOT DRUM	ANSITE	DECANT & PURGE H2O	7/2 FULL	

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Bulk Plant - HPI (AST)**  
 Project No.: **4629.02**  
 Date: **4-26-05**  
 Global ID No.: **T0602391121**  
 PM: **CJW**

Tech: **SJD**  
 Mob/Demob time: **.50/.25**  
 Travel time: **1.0**  
 Time on site: **8:00**  
 Time off site: **21:00**  
 Mileage: **30**

	MW14	MW17S	MW17D	MW18	MW21
WELL No.:					
DIAMETER (in)	1.00	1.50	1.50	1.50	1.00
SCREENED INTERVAL (ft)	6-15	15.5-18	22.5-27.5	18.5-21.5	10-12
DEPTH TO WATER (ft)					6.49
FIELD INTRINSICS					
pH	INITIAL	FINAL	INITIAL	FINAL	INITIAL
TEMP (°C)					
E <sub>ow</sub> (μmhos)					
ORP (mV)					22
DO (mg/L)					1.96
OTHER (units)					0.40
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING					
TIME					12:48
METHOD (DHP/CB/B)					CAM Pump
RATE (Lpm)					0.18
VOLUME (L.)					2.50
PURGE COLOR					CLEAR CLEAR
ODOR					SLIGHT RUEER
INTAKE DEPTH (FEET)					13.0
SAMPLE					
TIME					11:04
METHOD (DHP/CB/B)					CAM Pump
ANALYTES	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC
TOTAL DRAWDOWN (FEET)					0.38
REMARKS				TOO MUCH WATER IN RAVINE TO GET TD WELL	
WELL CONDITION					good
WASTE DRUMS					

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

Project

Tech: SJD

Name: Bulk Plant - HPI (AST)

.50 / 25

Project No.: 4629.02

Mob/Demob time: 1.0

Date: 4-26-05

Travel time: 8:00

Global ID No.: T0602391121

Time on site: 2110

PM: CJW

Time off site:

36

FIELD INTRINSICS DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING	WELL No.	MW22	MW26	MW31	MW32		
	DIAMETER (in)	2.00	2.00	1.50	1.50		
	SCREENED INTERVAL (ft)	10-12	5-10	16.5-18	14-15.5		
	DEPTH TO WATER (ft)	4.91	4.95	4.29			
	pH	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	TEMP (°C)						
	E <sub>ew</sub> (μmhos)						
	ORP (mV)		-79	-64	-90	UR	-63
	DO (mg/L)		1.19	0.59	1.43	0.49	1.43
	OTHER (units)						
PURGE	TIME		10:26	10:44	11:06	11:14	11:50
	METHOD (DHP/CB/B)		DHP	DHP	DHP		
	RATE (Lpm)		0.17	0.19	0.20		
	VOLUME (L)		3.0	1.50	1.60		
	COLOR	CLEAR	CLEAR	LT. GREY CLOUDY	LT. GREY CLOUDY	CLEAR	Cloudy w/SHEEN
	ODOR	MED. SULFUR		MED. SULFUR/RUBBER		MED. RUBBER/FUEL	
	INTAKE DEPTH (FEET)		8.0	17.0	14.5		
	TIME		10:46		11:16	12:00	
	METHOD (DHP/CB/B)		DHP	DHP	DHP		
	ANALYTICS		TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC	TPHg/BTEX; TPHd w/SGC		
SAMPLE	TOTAL DRAWDOWN (FEET)		0.64	4.31	2.73		
	REMARKS						
WELL CONDITION	WELL CONDITION	good	good	good	good		
	WASTE DRUMS						

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

REVISED:3/24/2005







21 West Fourth Street, Eureka, CA 95501  
TEL 707.443.5054  
FAX 707.443.0553

Project Name: BULK PLANT - HPI (AST)  
Project No.: 4629.02

Tech: SJD  
Date: 4-26-05



Project  
Name: **Bulk Plant - HPI (AST)**

Project No.: **4629.02**

Date: **4/12/05**

Golbal ID No.: **T0602391121**

PM: **CJW**

Tech: **SJD TLB**

Mob/Demob time: **15/5**

Travel time: **1.00**

Time on site: **8:00**

Time off site: **11:45**

Mileage: **36**

WELL No.	<b>MW3</b>	<b>MW7</b>	<b>MW9</b>	<b>MW10</b>	<b>* MW11</b>
DIAMETER (in)	<b>4.00</b>	<b>4.00</b>	<b>2.00</b>	<b>2.00</b>	<b>1.00</b>
SCREENED INTERVAL (ft)	<b>3-20</b>	<b>6-25</b>	<b>3-18</b>	<b>3-18</b>	<b>2-14</b>
DEPTH TO WATER (ft)					<b>12.26'</b>

FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH									
TEMP (°C)										
E <sub>ew</sub> (μmhos)										
ORP (mV)										
DO (mg/L)										
OTHER (units)										
DEPTH & MEASUREMENTS ARE REFERENCED TO TOP OF CASING	TIME									
	METHOD (DHP/CB/B)									<b>3/4 B</b>
	RATE (Lpm)									
	VOLUME (L)									
	COLOR									<b>Clear Lt. Brown</b>
	ODOR									
	INTAKE DEPTH (FEET)									<b>None</b>
SAMPLE	TIME									<b>10:15</b>
	METHOD (DHP/CB/B)									<b>B</b>
	ANALYTES	<b>TPHg/BTEX; TPHd w/SGC</b>								
	TOTAL DRAWDOWN (FEET)									<b>0.25</b>
	REMARKS									
WELL CONDITION									<b>No Cap</b>	
WASTE DRUMS									<b>NO COVER</b>	

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Bulk Plant - HPI (AST)**  
 Project No.: **4629.02**  
 Date: **4/26/05**  
 Global ID No.: **T0602391121**  
 PM: **CJW**

Tech: **SJD SLS**  
 Mob/Demob time: **5:15**  
 Travel time: **1.0**  
 Time on site: **7:00**  
 Time off site: **11:45**  
 Mileage: **36**

WELL No.	MW14 *	MW17S *	MW17D *	MW18 *	MW21
DIAMETER (in)	1.00	1.50	1.50	1.50	1.00
SCREENED INTERVAL (ft)	6-15	15.5-18	22.5-27.5	18.5-21.5	10-12
DEPTH TO WATER (ft)	10.27	3.42	8.33		
FIELD INTRINSICS					
pH	INITIAL	FINAL	INITIAL	FINAL	INITIAL
TEMP (°C)					
E <sub>cm</sub> (μohms)					
ORP (mV)					
DO (mg/L)					
OTHER (units)					
PURGE					
TIME	10:41	10:43	9:11	9:15	9:26
METHOD (DHP/CB/B)	3/4" B	3/4" B	3/4" B		
RATE (Lpm)	0.25	0.25	0.20		
VOLUME (L)	0.5	1.0	1.0		
COLOR	Clear	LT Brown milky	Clear	Clear	Clear
ODOR	None		Slight		
INTAKE DEPTH (FEET)	-	-	-		
SAMPLE					
TIME	10:53	9:20	9:36		
METHOD (DHP/CB/B)	3/4" B	3/4" B	3/4" B		
ANALYTES	TPHg/BTEX; TPHd w/SGC				
TOTAL DRAWDOWN (FEET)	2.74	6.83	8.34		
REMARKS					
WELL CONDITION	600d	600d	600d		
WASTE DRUMS					

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **Bulk Plant - HPI (AST)**  
Project No.: **4629.02**  
Date: **4/26/05**  
Global ID No.: **T0602391121**  
PM: **CJW**

Tech: **SJD**  
Mob/Demob time: **15:15**  
Travel time: **1:00**  
Time on site: **8:00**  
Time off site: **11:45**  
Mileage: **36**

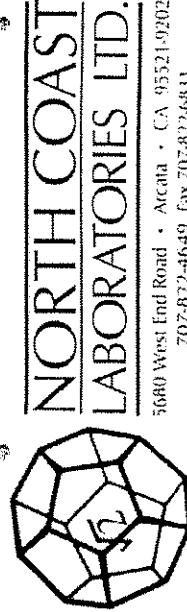
WELL No.:	MW22	MW26	MW31	MW32				
DIAMETER (in)	2.00	2.00	1.50	1.50				
SCREENED INTERVAL (ft) DEPTH TO WATER (ft)	10-12	5-10	14-15.5	16.5-18				
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
pH								
TEMP (°C)								
E <sub>ceq</sub> (μmhos)								
ORP (mV)								
DO (mg/L)								
OTHER (units)								
PURGE	TIME		TIME		TIME		TIME	
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING	METHOD (DHP/CB/B)		METHOD (DHP/CB/B)		METHOD (DHP/CB/B)		METHOD (DHP/CB/B)	
VOLUME (L)	RATE (Lpm)		RATE (Lpm)		RATE (Lpm)		RATE (Lpm)	
COLOR								
ODOR								
INTAKE DEPTH (FEET)								
SAMPLE	TIME		TIME		TIME		TIME	
ANALYTES	METHOD (DHP/CB/B)		METHOD (DHP/CB/B)		METHOD (DHP/CB/B)		METHOD (DHP/CB/B)	
TOTAL DRAWDOWN (FEET)	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
REMARKS								
WELL CONDITION								
WASTE DRUMS								



Project Name: E.S. Plant (AST)  
Project No.: 4629.02

Tech: JLS  
Date: 4/26/03

WELL ID:	175	WELL ID:	170	WELL ID:	11	WELL ID:	14	WELL ID:		WELL ID:	
TIME	DTW (ft)										
9:05	3.47	9:08	8.31	9:49	12.35	10:34	10.38				
9:10	3.47	9:23	8.33	9:54	12.96	10:39	10.35				
WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)										
WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)										



**NORTH COAST  
LABORATORIES LTD.**

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707-822-4649 fax 707-822-6831

**Chain of Custody**

**LABORATORY NUMBER**

Attention: Accounts Payable  
Results & Invoice to: Laco Associates  
Address: 21 W. 4th St. Eureka CA 95501

Phone: (707) 443-5054

Copies of Report to: LACO; Chris Watt

Sampler (Sign & Print): SID *Chris*

**PROJECT INFORMATION**

Project Number: 4629.02

Project Name: HPI - Bulk Plant-AST

Purchase Order Number: task 3023

ANALYSIS	TPHg/BTEX	TPhd w/SGC

TAT:  24 Hr  48 Hr  5 Day  5-7 Day  
 STD (2-3 Wk)  Other: \_\_\_\_\_

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms   
Preliminary: FAX  Verbal  By: \_\_\_\_\_  
Final Report: FAX  Verbal  By: \_\_\_\_\_

**CONTAINER CODES:** 1—1/2 gal. pl; 2—250 ml pl;  
3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG;  
6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA;  
10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar;  
13—brass tube; 14—other

**PRESERVATIVE CODES:** a—HNO<sub>3</sub>; b—HCl; c—H<sub>2</sub>SO<sub>4</sub>;  
d—Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>; e—NaOH; f—C<sub>6</sub>H<sub>5</sub>O<sub>2</sub>Cl; g—other

**SAMPLE CONDITION/SPECIAL INSTRUCTIONS**  
GEOTRACKER

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*
4629-MW-3-W		4-26-05	AM	GW
4629-MW-9-W				
4629-MW-10-W				
4629-MW-11-W				
4629-MW-14-W				
4629-MW-17s-W				
4629-MW-17d-W				
4629-MW-21-W				
4629-MW-22-W				

RElinquished BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME

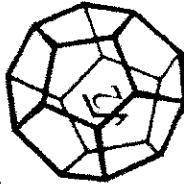
**SAMPLE DISPOSAL**  
 NCL Disposal of Non-Contaminated  
 Return  
 Pickup

**CHAIN OF CUSTODY SEALS Y/N/NA**

**SHIPPED VIA:** UPS Air-Ex Fed-Ex Bus Hand

\*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

**ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT**



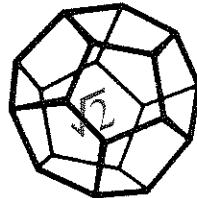
**NORTH COAST  
LABORATORIES LTD.**

(630) West End Road • Arcata • CA 95521-9202  
707-822-4649 Fax 707-822-6831

## Chain of Custody

DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

## *Attachment 2*



NORTH COAST  
LABORATORIES LTD.

April 19, 2005

LACO Associates  
P.O. Box 1023  
Eureka, CA 95502

RECEIVED	
LACO ASSOCIATES	
APR 21 2005	
BY:	JG

Order No.: 0503661  
Invoice No.: 49442  
PO No.: TASK 3020  
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.02, HPI-Bulk Plant-AST

CJW  
FRB

**SAMPLE IDENTIFICATION**

Fraction Client Sample Description

01A 4629-MW3-W  
01D 4629-MW3-W  
02A 4629-MW31-W  
02D 4629-MW31-W  
03A 4629-MW32-W  
03D 4629-MW32-W  
04A 4629-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

**REPORT CERTIFIED BY**

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.  
Laboratory Director

**CLIENT:** LACO Associates  
**Project:** 4629.02, HPI-Bulk Plant-AST  
**Lab Order:** 0503661

**CASE NARRATIVE**

All samples submitted for a silica gel cleanup were initially analyzed for diesel/motor oil. The samples showing no detectable levels of the analytes were not subjected to the cleanup procedure.

**TPH as Diesel/Motor Oil w/ Silica Gel Cleanup:**

Samples 4629-MW31-W and 4629-MW32-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples also contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

The method blank that is associated with the samples analyzed on 4/12/05 had values above the reporting limits for both diesel and motor oil. The samples with values above the reporting limit for diesel did not show the same pattern as the method blank. The samples with values above the reporting limit for diesel were re-extracted and analyzed. Sample 4629-MW32-W had problems associated with the re-extraction and is being reported from the analysis on 4/12/05. Because the sample did not have the same pattern as the method blank and the re-extracted sample showed a pattern that confirms the original analysis, the data were accepted.

**TPH as Gasoline:**

The gasoline values for samples 4629-MW3-W, 4629-MW31-W and 4629-MW32-W include the reported gasoline components in addition to other peaks in the gasoline range.

**BTEX:**

Some reporting limits were raised for samples 4629-MW31-W and 4629-MW32-W due to matrix interference.

The surrogate recovery was below the lower acceptance limit for sample 4629-QCTB-W. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

Date: 19-Apr-05  
WorkOrder: 0503661

## ANALYTICAL REPORT

Client Sample ID: 4629-MW3-W      Received: 3/30/05      Collected: 3/30/05 0:00  
Lab ID: 0503661-01A      Matrix: Groundwater

Test Name:	Reference: EPA 5030/EPA 8021B					
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/9/05
Benzene	38	5.0	µg/L	10		4/9/05
Toluene	1.2	0.50	µg/L	1.0		4/9/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/9/05
m,p-Xylene	0.59	0.50	µg/L	1.0		4/9/05
o-Xylene	ND	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	104	85-115	% Rec	1.0		4/9/05

Test Name: TPH as Gasoline      Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	180	50	µg/L	1.0		4/9/05

Client Sample ID: 4629-MW3-W      Received: 3/30/05      Collected: 3/30/05 0:00  
Lab ID: 0503661-01D      Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup      Reference: EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/8/05	4/12/05
TPHC Motor Oil	ND	170	µg/L	1.0	4/8/05	4/12/05

Client Sample ID: 4629-MW31-W      Received: 3/30/05      Collected: 3/30/05 0:00  
Lab ID: 0503661-02A      Matrix: Groundwater

Test Name: BTEX      Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	8.0	µg/L	1.0		4/9/05
Benzene	240	50	µg/L	100		4/9/05
Toluene	ND	20	µg/L	1.0		4/9/05
Ethylbenzene	ND	5.0	µg/L	1.0		4/9/05
m,p-Xylene	ND	5.0	µg/L	1.0		4/9/05
o-Xylene	ND	5.0	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	102	85-115	% Rec	1.0		4/9/05

Test Name: TPH as Gasoline      Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,100	50	µg/L	1.0		4/9/05

Date: 19-Apr-05  
WorkOrder: 0503661

## ANALYTICAL REPORT

Client Sample ID: 4629-MW31-W Received: 3/30/05 Collected: 3/30/05 0:00  
Lab ID: 0503661-02D Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup Reference: EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	82	50	µg/L	1.0	4/12/05	4/15/05
TPHC Motor Oil	ND	170	µg/L	1.0	4/12/05	4/15/05

Client Sample ID: 4629-MW32-W Received: 3/30/05 Collected: 3/30/05 0:00  
Lab ID: 0503661-03A Matrix: Groundwater

Test Name: BTEX Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		4/9/05
Benzene	680	50	µg/L	100		4/9/05
Toluene	13	5.0	µg/L	10		4/9/05
Ethylbenzene	ND	10	µg/L	1.0		4/9/05
m,p-Xylene	ND	10	µg/L	1.0		4/9/05
o-Xylene	ND	5.0	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	91.3	85-115	% Rec	100		4/9/05

Test Name: TPH as Gasoline Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	2,000	500	µg/L	10		4/9/05

Client Sample ID: 4629-MW32-W Received: 3/30/05 Collected: 3/30/05 0:00  
Lab ID: 0503661-03D Matrix: Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup Reference: EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	160	50	µg/L	1.0	4/8/05	4/12/05
TPHC Motor Oil	ND	170	µg/L	1.0	4/8/05	4/12/05

\*

Date: 19-Apr-05  
WorkOrder: 0503661

## ANALYTICAL REPORT

Client Sample ID: 4629-QCTB-W      Received: 3/30/05      Collected: 3/30/05 0:00  
Lab ID: 0503661-04A      Matrix: Trip Blank

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/8/05
Benzene	ND	0.50	µg/L	1.0		4/8/05
Toluene	ND	0.50	µg/L	1.0		4/8/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/8/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/8/05
o-Xylene	ND	0.50	µg/L	1.0		4/8/05
Surrogate: Cis-1,2-Dichloroethylene	78.7	85-115	% Rec	1.0		4/8/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/8/05

# North Coast Laboratories, Ltd.

Date: 19-Apr-05

**CLIENT:** LACO Associates

**Work Order:** 0503661

**Project:** 4629.02, HPI-Bulk Plant-AST

## QC SUMMARY REPORT

Method Blank

Sample ID	MB-4/8/05	Batch ID:	R34290	Test Code:	BTXEW	Units:	µg/L	Analysis Date	4/8/05 8:04:21 PM	Prep Date		
Client ID:				Run ID:	ORGCC8_050404BB			SeqNo:	497151			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE		ND	3.0									
Benzene		ND	0.50									
Toluene		ND	0.50									
Ethylbenzene		ND	0.50									
m,p-Xylene		ND	0.50									
o-Xylene		ND	0.50									
Cis-1,2-Dichloroethylene		0.878	0.10	1.00	0	87.8%	0	85	115	0		
Sample ID	MB-13296	Batch ID:	13296	Test Code:	SGTPDMW	Units:	µg/L	Analysis Date	4/12/05 1:29:03 AM	Prep Date	4/8/05	
Client ID:				Run ID:	ORGCC5_050411B			SeqNo:	498755			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)		188.1	50									
TPHC Motor Oil		180.9	170									
Sample ID	MB-13318	Batch ID:	13318	Test Code:	SGTPDMW	Units:	µg/L	Analysis Date	4/15/05 5:05:09 PM	Prep Date	4/12/05	
Client ID:				Run ID:	ORGCC5_050411B			SeqNo:	498764			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)		24.57	50									
TPHC Motor Oil		ND	170									
Sample ID	MB-4/8/05	Batch ID:	R34289	Test Code:	TPHCGW	Units:	µg/L	Analysis Date	4/8/05 8:04:21 PM	Prep Date		
Client ID:				Run ID:	ORGCC8_050408A			SeqNo:	497137			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)		ND	50									

Qualifiers:

ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank

# North Coast Laboratories, Ltd.

Date: 19-Apr-05

## QC SUMMARY REPORT

Laboratory Control Spike

**CLIENT:** LACCO Associates  
**Work Order:** 0503661  
**Project:** 4629.02, HPI-Bulk Plant-AST

Sample ID	Batch ID:	Test Code:	Units:	Analysis Date 4/8/05 5:11:22 PM			Prep Date				
Client ID:		Run ID:	µg/L	SeqNo: 497149							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual
MTBE	45.09	3.0	40.0	0	113%	85	115	115	0		
Benzene	5.298	0.50	5.00	0	106%	85	115	115	0		
Toluene	5.089	0.50	5.00	0	102%	85	115	115	0		
Ethylbenzene	5.009	0.50	5.00	0	100%	85	115	115	0		
m,p-Xylene	10.13	0.50	10.0	0	101%	85	115	115	0		
o-Xylene	5.049	0.50	5.00	0	101%	85	115	115	0		
Cis-1,2-Dichloroethylene	0.991	0.10	1.00	0	99.1%	85	115	115	0		

Sample ID	Batch ID:	Test Code:	Units:	Analysis Date 4/8/05 5:46:14 PM			Prep Date				
Client ID:		Run ID:	µg/L	SeqNo: 497150							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual
MTBE	43.29	3.0	40.0	0	108%	85	115	45.1	4.08%	15	
Benzene	5.261	0.50	5.00	0	105%	85	115	5.30	0.715%	15	
Toluene	5.057	0.50	5.00	0	101%	85	115	5.09	0.637%	15	
Ethylbenzene	4.993	0.50	5.00	0	99.9%	85	115	5.01	0.326%	15	
m,p-Xylene	10.12	0.50	10.0	0	101%	85	115	10.1	0.131%	15	
o-Xylene	5.018	0.50	5.00	0	100%	85	115	5.05	0.619%	15	
Cis-1,2-Dichloroethylene	1.01	0.10	1.00	0	101%	85	115	0.991	2.02%	15	

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	B

# QC SUMMARY REPORT

Laboratory Control Spike Duplicate

CLIENT: LACO Associates  
Work Order: 0503661  
Project: 4629.02, HPI-Bulk Plant-AST

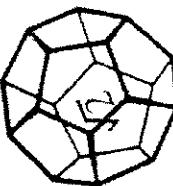
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date	Prep Date						
Client ID:		Run ID:	µg/L	4/11/05 11:16:53 PM	4/8/05						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	357.6	50	500	0	71.5%	42	96	352	1.50%	15	B
TPHC Motor Oil	922.4	170	1,000	0	92.2%	52	103	898	2.62%	15	B
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date	Prep Date						
Client ID:		Run ID:	µg/L	4/15/05 2:20:14 PM	4/12/05						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	289.1	50	500	0	57.8%	42	96	0	0	0	
TPHC Motor Oil	648.6	170	1,000	0	64.9%	52	103	0	0	0	
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date	Prep Date						
Client ID:		Run ID:	µg/L	4/15/05 2:53:17 PM	4/12/05						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	292.5	50	500	0	58.5%	42	96	289	1.18%	15	
TPHC Motor Oil	651.0	170	1,000	0	65.1%	52	103	649	0.378%	15	
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date	Prep Date						
Client ID:		Run ID:	µg/L	4/8/05 6:20:54 PM							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	553.8	50	500	0	112%	81	126	0	0	0	
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date	Prep Date						
Client ID:		Run ID:	µg/L	4/8/05 6:55:30 PM							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	547.5	50	500	0	110%	81	126	559	2.03%	15	

Qualifiers:

ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank



**NORTH COAST  
LABORATORIES LTD.**

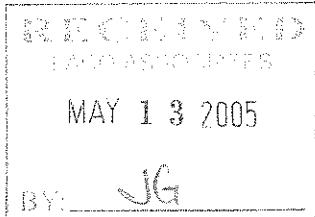
6650 West Ind Road • Arcata • CA 95521-9202  
707.822.4619 Fax 707.822.4911

## Chain of Custody

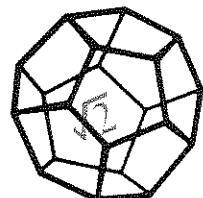
same road : Altair : CA 33121-3202

Attention: Accounts Payable	TAT: <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 5 Day <input type="checkbox"/> 5-7 Day			
Results & Invoice to: Laco Associates	STD (2-3 Wk) <input type="checkbox"/> Other: _____			
Address: 21 W. 4th St. Eureka CA 95501	PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES <input type="checkbox"/>			
REPORTING REQUIREMENTS: State Forms <input type="checkbox"/>				
Preliminary: FAX <input checked="" type="checkbox"/> Verbal <input type="checkbox"/> By: _____				
Final Report: FAX <input type="checkbox"/> Verbal <input type="checkbox"/> By: _____				
CONTAINER CODES: 1— $\frac{1}{2}$ gal. pt; 2—250 ml pt; 3—500 ml pt; 4—1 lt Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 lt BG; 8—1 l CG; 9—40 ml VOA; 10—12.5 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other				
PRESERVATIVE CODES: a—HNO <sub>3</sub> ; b—HCl; c—H <sub>2</sub> SO <sub>4</sub> ; d—Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ; e—NaOH; f—C <sub>2</sub> H <sub>5</sub> O <sub>2</sub> Cl; g—other				
SAMPLE CONDITION/SPECIAL INSTRUCTIONS GEOTRACKER				
TPH <sub>d</sub> /mo w/SGC				
ANALYSIS TPH <sub>d</sub> /BTEx				
CONTAINER PRESERVATIVE				
Sampler (Sign & Print): SID <i>S. D.</i>	Phone: (707) 443-5054			
Copies of Report to: LACO; Chris Watt	Project Number: 4629.02			
Project Name: HPI - Bulk Plant-AST	Purchase Order Number: task 3020			
LAB ID	SAMPLE ID	DATE	TIME	MATRIX*
4629-MW-3-W	3-30-05	AM	GW	3 1
				3 1
	4629-MW31-W			3 1
				3 1
	4629-MW32-W			1
	4629-QCTB-W			
RElinquished BY (Sign & Print)		DATE/TIME	RECEIVED BY (Sign)	SAMPLE DISPOSAL
<i>Steve Davis</i>		3-30-05 4:25 pm	<i>John Johnson</i>	NCL Disposal of Non-Contaminated <input checked="" type="checkbox"/> Return <input type="checkbox"/> Pickup
SHIPPED VIA: UPS Air-Ex Fed-Ex		Bug Hand	CHAIN OF CUSTODY SEALS Y/N/NA <input type="checkbox"/>	

**MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.



May 11, 2005



**NORTH COAST  
LABORATORIES LTD.**

LACO Associates  
P.O. Box 1023  
Eureka, CA 95502

Attn: Accounts Payable

RE: 4629.02, HPI-Bulk Plant-AST

Order No.: 0504594  
Invoice No.: 50045  
PO No.: TASK 3023  
ELAP No. 1247-Expires July 2006

#### SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW-3-W
01D	4629-MW-3-W
02A	4629-MW-9-W
02D	4629-MW-9-W
03A	4629-MW-10-W
03D	4629-MW-10-W
04A	4629-MW-11-W
04D	4629-MW-11-W
05A	4629-MW-14-W
05D	4629-MW-14-W
06A	4629-MW-17s-W
06D	4629-MW-17s-W
07A	4629-MW-17d-W
07D	4629-MW-17d-W
08A	4629-MW-21-W
08D	4629-MW-21-W
09A	4629-MW-7-W
09D	4629-MW-7-W
10A	4629-MW-26-W
10D	4629-MW-26-W
11A	4629-MW-31-W
11D	4629-MW-31-W
12A	4629-MW-32-W
12D	4629-MW-32-W
13A	4629-QCFD
14A	4629-QCMB
15A	4629-QCTB

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

#### REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.  
Laboratory Director

**CLIENT:** LACO Associates  
**Project:** 4629.02, HPI-Bulk Plant-AST  
**Lab Order:** 0504594

**CASE NARRATIVE**

All samples submitted for a silica gel cleanup were initially analyzed for diesel. The samples showing no detectable levels of the analyte were not subjected to the cleanup procedure.

**TPH as Diesel with Silica Gel Cleanup:**

The surrogate recoveries for samples 4629-MW-3-W, 4629-MW-9-W, 4629-MW-7-W, 4629-MW-31-W and 4629-MW-32-W were outside of the acceptance limits. The surrogate recoveries for the quality control samples were within the acceptance limits. This indicates that the low surrogate recoveries may be due to matrix effects from the samples.

Samples 4629-MW-3-W, 4629-MW-9-W, 4629-MW-31-W, and 4629-MW-32-W contain some material lighter than diesel. Some of this material extends into the diesel range. These samples also contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

There was an interferent present in the method blank, analyzed on 5/6/05, that was above the reporting limit for diesel. The samples analyzed on 5/6/05 were not affected by the interferent; therefore, the data were accepted.

The relative percent difference's (RPD's) for the laboratory control samples analyzed on 5/10/05 were above the upper acceptance limits for diesel and the surrogate. This indicates that the results could be variable.

**TPH as Gasoline:**

Samples 4629-MW-9-W and 4629-QCFD do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

The gasoline values for samples 4629-MW-3-W, 4629-MW-7-W, 4629-MW-31-W and 4629-MW-32-W include the reported gasoline components in addition to other peaks in the gasoline range.

**BTEX:**

Some reporting limits were raised for samples 4629-MW-3-W, 4629-MW-7-W, 4629-MW-31-W and 4629-MW-32-W due to matrix interference.

The laboratory control sample (LCS) recovery was above the upper acceptance limit for MTBE. The laboratory control sample duplicate (LCSD) recovery was within the acceptance limits; therefore, the data were accepted.

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-3-W  
Lab ID: 0504594-01A Matrix: Groundwater

Test Name:	Reference: EPA 5030/EPA 8021B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		4/29/05
Benzene	270	25	µg/L	50		4/29/05
Toluene	11	10	µg/L	20		4/29/05
Ethylbenzene	2.7	0.50	µg/L	1.0		4/29/05
m,p-Xylene	4.5	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	2.0	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	99.6	85-115	% Rec	20		4/29/05

Test Name:	Reference: EPA 5030/GCFID(LUFT)/EPA 8015B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,400	50	µg/L	1.0		4/29/05

Client Sample ID: 4629-MW-3-W  
Lab ID: 0504594-01D Matrix: Groundwater

Test Name:	Reference: EPA 3510/3630/GCFID(LUFT)/8015B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	71	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	25.3	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW-9-W  
Lab ID: 0504594-02A Matrix: Groundwater

Test Name:	Reference: EPA 5030/EPA 8021B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/29/05
Benzene	ND	0.50	µg/L	1.0		4/29/05
Toluene	ND	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/29/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	0.50	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	103	85-115	% Rec	1.0		4/29/05

Test Name:	Reference: EPA 5030/GCFID(LUFT)/EPA 8015B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	160	50	µg/L	1.0		4/29/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-9-W  
Lab ID: 0504594-02D Matrix: Groundwater

Test Name: TPH as Diesel with Silica Gel Cleanup

Reference: EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	69	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	58.8	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW-10-W  
Lab ID: 0504594-03A Matrix: Groundwater

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	99.4	85-115	% Rec	1.0		4/28/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

Client Sample ID: 4629-MW-10-W

Lab ID: 0504594-03D Matrix: Groundwater

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/29/05	4/29/05
Surrogate: N-Tricosane	94.4	70-130	% Rec	1.0	4/29/05	4/29/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-11-W  
Lab ID: 0504594-04A Matrix: Groundwater

Test Name: BTEX		Reference: EPA 5030/EPA 8021B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	102	85-115	% Rec	1.0		4/28/05

Test Name: TPH as Gasoline		Reference: EPA 5030/GCFID(LUFT)/EPA 8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

Client Sample ID: 4629-MW-11-W  
Lab ID: 0504594-04D Matrix: Groundwater

Test Name: TPH as Diesel		Reference: EPA 3510/GCFID(LUFT)/EPA 8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/29/05	4/29/05
Surrogate: N-Tricosane	92.6	70-130	% Rec	1.0	4/29/05	4/29/05

Client Sample ID: 4629-MW-14-W  
Lab ID: 0504594-05A Matrix: Groundwater

Test Name: BTEX		Reference: EPA 5030/EPA 8021B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	109	85-115	% Rec	1.0		4/28/05

Test Name: TPH as Gasoline		Reference: EPA 5030/GCFID(LUFT)/EPA 8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

**Client Sample ID:** 4629-MW-14-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-05D      **Matrix:** Groundwater

**Test Name:** TPH as Diesel      **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/29/05	4/29/05
Surrogate: N-Tricosane	89.8	70-130	% Rec	1.0	4/29/05	4/29/05

**Client Sample ID:** 4629-MW-17s-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-06A      **Matrix:** Groundwater

**Test Name:** BTEX      **Reference:** EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	111	85-115	% Rec	1.0		4/28/05

**Test Name:** TPH as Gasoline      **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

**Client Sample ID:** 4629-MW-17s-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-06D      **Matrix:** Groundwater

**Test Name:** TPH as Diesel      **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/29/05	4/29/05
Surrogate: N-Tricosane	85.1	70-130	% Rec	1.0	4/29/05	4/29/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-17d-W  
Lab ID: 0504594-07A Matrix: Groundwater

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/29/05
Benzene	ND	0.50	µg/L	1.0		4/29/05
Toluene	ND	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/29/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	0.50	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	103	85-115	% Rec	1.0		4/29/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/29/05

Client Sample ID: 4629-MW-17d-W

Received: 4/26/05

Collected: 4/26/05 0:00

Lab ID: 0504594-07D Matrix: Groundwater

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0		4/29/05
Surrogate: N-Tricosane	89.3	70-130	% Rec	1.0		4/29/05

Client Sample ID: 4629-MW-21-W

Received: 4/26/05

Collected: 4/26/05 0:00

Lab ID: 0504594-08A Matrix: Groundwater

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/29/05
Benzene	ND	0.50	µg/L	1.0		4/29/05
Toluene	ND	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/29/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	0.50	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	106	85-115	% Rec	1.0		4/29/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/29/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-21-W      Received: 4/26/05      Collected: 4/26/05 0:00  
Lab ID: 0504594-08D      Matrix: Groundwater

Test Name: TPH as Diesel      Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/29/05	4/29/05
Surrogate: N-Tricosane	94.7	70-130	% Rec	1.0	4/29/05	4/29/05

Client Sample ID: 4629-MW-7-W      Received: 4/26/05      Collected: 4/26/05 0:00  
Lab ID: 0504594-09A      Matrix: Groundwater

Test Name: BTEX      Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	18	µg/L	1.0	4/29/05	
Benzene	13	5.0	µg/L	10	4/29/05	
Toluene	4.9	0.50	µg/L	1.0	4/29/05	
Ethylbenzene	2.8	0.50	µg/L	1.0	4/29/05	
m,p-Xylene	2.1	0.50	µg/L	1.0	4/29/05	
o-Xylene	ND	2.0	µg/L	1.0	4/29/05	
Surrogate: Cis-1,2-Dichloroethylene	89.5	85-115	% Rec	10	4/29/05	

Test Name: TPH as Gasoline      Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	500	50	µg/L	1.0	4/29/05	

Client Sample ID: 4629-MW-7-W      Received: 4/26/05      Collected: 4/26/05 0:00  
Lab ID: 0504594-09D      Matrix: Groundwater

Test Name: TPH as Diesel with Silica Gel Cleanup      Reference: EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/3/05	5/6/05
Surrogate: N-Tricosane	35.4	70-130	% Rec	1.0	5/3/05	5/6/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-MW-26-W  
Lab ID: 0504594-10A Matrix: Groundwater

Test Name: BTEX		Reference: EPA 5030/EPA 8021B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/29/05
Benzene	ND	0.50	µg/L	1.0		4/29/05
Toluene	ND	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/29/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	0.50	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	95.4	85-115	% Rec	1.0		4/29/05

Test Name: TPH as Gasoline		Reference: EPA 5030/GCFID(LUFT)/EPA 8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/29/05

Client Sample ID: 4629-MW-26-W  
Lab ID: 0504594-10D Matrix: Groundwater

Test Name: TPH as Diesel with Silica Gel Cleanup		Reference: EPA 3510/3630/GCFID(LUFT)/8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/3/05	5/6/05
Surrogate: N-Tricosane	86.5	70-130	% Rec	1.0	5/3/05	5/6/05

Client Sample ID: 4629-MW-31-W  
Lab ID: 0504594-11A Matrix: Groundwater

Test Name: BTEX		Reference: EPA 5030/EPA 8021B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	7.0	µg/L	1.0		4/29/05
Benzene	270	50	µg/L	100		4/29/05
Toluene	7.9	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	5.0	µg/L	1.0		4/29/05
m,p-Xylene	ND	5.0	µg/L	1.0		4/29/05
o-Xylene	ND	5.0	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	111	85-115	% Rec	1.0		4/29/05

Test Name: TPH as Gasoline		Reference: EPA 5030/GCFID(LUFT)/EPA 8015B				
<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,000	50	µg/L	1.0		4/29/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

**Client Sample ID:** 4629-MW-31-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-11D      **Matrix:** Groundwater

**Test Name:** TPH as Diesel with Silica Gel Cleanup      **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	83	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	48.0	70-130	% Rec	1.0	5/3/05	5/10/05

**Client Sample ID:** 4629-MW-32-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-12A      **Matrix:** Groundwater

**Test Name:** BTEX      **Reference:** EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	20	µg/L	1.0		4/29/05
Benzene	630	50	µg/L	100		4/29/05
Toluene	15	5.0	µg/L	10		4/29/05
Ethylbenzene	ND	12	µg/L	1.0		4/29/05
m,p-Xylene	ND	12	µg/L	1.0		4/29/05
o-Xylene	ND	7.0	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	106	85-115	% Rec	10		4/29/05

**Test Name:** TPH as Gasoline      **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	2,400	500	µg/L	10		4/29/05

**Client Sample ID:** 4629-MW-32-W      **Received:** 4/26/05      **Collected:** 4/26/05 0:00  
**Lab ID:** 0504594-12D      **Matrix:** Groundwater

**Test Name:** TPH as Diesel with Silica Gel Cleanup      **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	150	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	56.2	70-130	% Rec	1.0	5/3/05	5/10/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-QCFD  
Lab ID: 0504594-13A Matrix: Groundwater

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/29/05
Benzene	ND	0.50	µg/L	1.0		4/29/05
Toluene	ND	0.50	µg/L	1.0		4/29/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/29/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/29/05
o-Xylene	ND	0.50	µg/L	1.0		4/29/05
Surrogate: Cis-1,2-Dichloroethylene	106	85-115	% Rec	1.0		4/29/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	160	50	µg/L	1.0		4/29/05

Client Sample ID: 4629-QCMB

Received: 4/26/05

Collected: 4/26/05 0:00

Lab ID: 0504594-14A Matrix: Groundwater

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	93.1	85-115	% Rec	1.0		4/28/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

Date: 11-May-05  
WorkOrder: 0504594

## ANALYTICAL REPORT

Client Sample ID: 4629-QCTB

Received: 4/26/05

Collected: 4/26/05 0:00

Lab ID: 0504594-15A

Matrix: Trip Blank

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		4/28/05
Benzene	ND	0.50	µg/L	1.0		4/28/05
Toluene	ND	0.50	µg/L	1.0		4/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/28/05
o-Xylene	ND	0.50	µg/L	1.0		4/28/05
Surrogate: Cis-1,2-Dichloroethylene	109	85-115	% Rec	1.0		4/28/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/28/05

## North Coast Laboratories, Ltd.

Date: 11-May-05

**CLIENT:** LACO Associates  
**Work Order:** 0504594  
**Project:** 4629.02, HPI-Bulk Plant-AST

**QC SUMMARY REPORT**

Method Blank

Sample ID	MB-4/28/05	Batch ID:	R34661	Test Code:	BTXEW	Units:	µg/L	Analysis Date	4/28/05 8:20:48 PM	Prep Date			
Client ID:				Run ID:	ORGC8_050428B			SeqNo:	502449				
Analyte			Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE			ND	3.0									
Benzene			ND	0.50									
Toluene			ND	0.50									
Ethylbenzene			ND	0.50									
m,p-Xylene			ND	0.50									
o-Xylene			ND	0.50									
Cis-1,2-Dichloroethylene			0.932	0.10	1.00		0	93.2%	85	115	0		
Sample ID	MB-13440	Batch ID:	13440	Test Code:	SGTPHDW	Units:	µg/L	Analysis Date	5/6/05 12:12:27 PM	Prep Date			
Client ID:				Run ID:	ORGC5_050506A			SeqNo:	504014				
Analyte			Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)			126.2	50									
N-Tricosane			44.7	0.10	50.0		0	89.5%	70	130	0		
Sample ID	MB-13440	Batch ID:	13440	Test Code:	SGTPHDW	Units:	µg/L	Analysis Date	5/10/05 3:29:57 PM	Prep Date			
Client ID:				Run ID:	ORGC5_050510A			SeqNo:	504128				
Analyte			Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)			41.64	50									
N-Tricosane			37.3	0.10	50.0		0	74.6%	70	130	0		
Sample ID	MB-4/28/05	Batch ID:	R34660	Test Code:	TPHCGW	Units:	µg/L	Analysis Date	4/28/05 8:20:48 PM	Prep Date			
Client ID:				Run ID:	ORGC8_050428A			SeqNo:	502427				
Analyte			Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)			ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

# QC SUMMARY REPORT

Method Blank

**CLIENT:** LACO Associates  
**Work Order:** 0504594  
**Project:** 4629.02, HPI-Bulk Plant-AST

Sample ID	MB:13424	Batch ID:	13424	Test Code:	TPHDW	Units:	µg/L	Analysis Date	4/29/05 5:41:34 PM	Prep Date	4/29/05	
Client ID:				Run ID:	ORG C7_050429A		<th>SeqNo:</th> <td>502300</td> <td></td> <td></td>	SeqNo:	502300			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Diesel (C12-C22)	ND	50										
N-Tricosane	46.5	0.10	50.0	0	93.0%	70	130		0			

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank